

PALO ALTO DIVISION VAMC

3801 Miranda Ave (04d)
Palo Alto, CA 94304

SOMATOM FORCE



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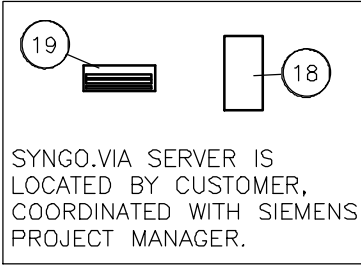
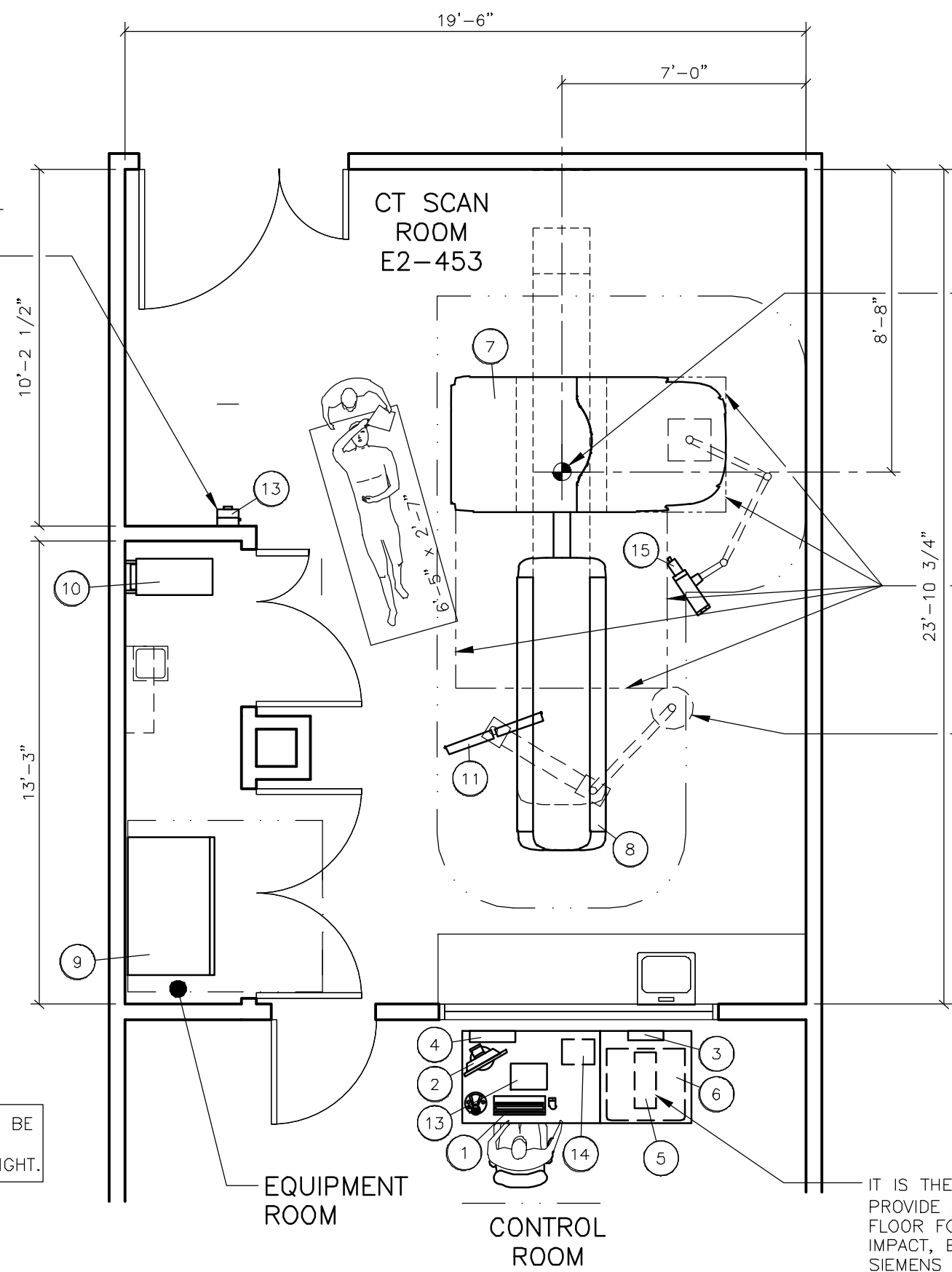
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Project #: 1401829

SIEMENS
SIEMENS MEDICAL SOLUTIONS
51 Valley Stream Parkway
Malvern, PA 19355
www.usa.siemens.com/medical

THIS SET OF FINAL DRAWINGS IS REFLECTIVE OF THE LATEST SALES CONFIGURATION. ANY CHANGES TO THIS SALES CONFIGURATION MAY REQUIRE A REVISION TO THIS PROJECT PLAN. IF REQUESTED, SIEMENS WILL PRODUCE A REVISED SET OF FINAL DRAWINGS TO REFLECT THE CHANGES, HOWEVER SIEMENS IS NOT RESPONSIBLE FOR ANY CONSTRUCTION COSTS ASSOCIATED WITH THE CHANGES THAT OCCUR FROM THIS PLAN MODIFICATION.

SURGE SUPPRESSOR TO BE SUPPLIED BY SIEMENS, LOCATED AND INSTALLED BY CUSTOMER/CONTRACTOR. IF IT IS TO BE RELOCATED, IT MUST BE DEINSTALLED, RELOCATED AND REINSTALLED BY THE CUSTOMER/CONTRACTOR, IF NECESSARY. IT MUST BE LOCATED WITHIN 3'-0" OF THE CIRCUIT BREAKER.



NO OBSTRUCTION ZONE - THERE SHOULD BE NO CEILING MOUNTED ITEMS THAT HANG BELOW 86" AFF IN THIS AREA TO ALLOW FOR THE COVER OF THE GANTRY TO OPEN UP.

IF THE CEILING HEIGHT IS BELOW 8'-7 1/2" THE OVERHEAD SUPPORT CANNOT BE PLACED CENTERED ABOVE THE GANTRY. IT MUST BE PLACED SO THAT BOTH ARMS OF THE SUPPORT SYSTEM DO NOT REACH OVER THE GANTRY.

RESTRICTIONS:
NOT APPLICABLE.

WARNINGS:
DUE TO THE NOISE LEVEL OF THE SIEMENS CABINETS, IT IS RECOMMENDED THAT THE CABINETS BE PLACED IN A SEPARATE EQUIPMENT ROOM.

IT IS THE RESPONSIBILITY OF THE CUSTOMER/CONTRACTOR TO PROVIDE A MEANS OF MOUNTING THE PC TOWER(S) OFF FINISHED FLOOR FOR DAMAGE PROTECTION AGAINST TIP-OVER, FLUIDS, IMPACT, ETC. ADDITIONAL MOUNTING IS NOT NECESSARY IF SIEMENS CONTAINER IS UTILIZED.

ARCHITECTURAL EQUIPMENT PLAN

ROOM MEASUREMENTS

ALL ROOM MEASUREMENTS AND ROOM DETAIL SPECIFICATIONS MUST BE VERIFIED ON SITE PRIOR TO BEGINNING ANY CONSTRUCTION WORK.

SCALE: 1/4" = 1'-0"

CASEWORK & ACCESSORY NOTES

- ALL CASEWORK IS EITHER EXISTING OR IS TO BE DESIGNED, DETAILED, FURNISHED AND INSTALLED BY THE CUSTOMER AND/OR CONTRACTOR. FOLLOW DESIGN RECOMMENDATIONS INCLUDED HEREWITH, AS THEY ARE ESSENTIAL FOR THE SUCCESSFUL INSTALLATION & OPERATION OF THE SIEMENS EQUIPMENT.
- ALL FURNITURE (CHAIRS, ETC.) FOR THE CONTROL ROOM ARE TO BE PROVIDED BY THE CUSTOMER.

PLANNING REQUIREMENTS

EMERGENCY POWER OFF (EPO) BUTTONS REQUIRED IN CONTROL AREA, EXAMINATION ROOM AND EQUIPMENT AREA.

DOOR (SAFETY) SWITCH REQUIRED ON ALL DOORS ACCESSING THE EXAMINATION ROOM IN ACCORDANCE WITH LOCAL CODES.

ENVIRONMENTAL/POWER AUDIT

AS AN INDICATION OF OUR COMMITMENT TO QUALITY, SIEMENS MAY, AT NO COST TO YOUR FACILITY, CHECK THE OPERATING ENVIRONMENT AFTER SYSTEM TURNOVER TO DETERMINE IF THE REQUIREMENTS FOR TEMPERATURE, HUMIDITY, POWER, AND GROUNDING ARE MET AS PER SIEMENS' PUBLISHED SPECIFICATIONS. SIEMENS WILL GENERATE A WRITTEN REPORT DETAILING THE ENVIRONMENTAL AND ELECTRICAL CONDITION OF THE SITE AFTER TURNOVER AND WILL SHARE THE REPORT WITH YOU. IN THE EVENT WE IDENTIFY ANY ENVIRONMENTAL/POWER DEFICIENCIES AT THE SITE, YOUR FACILITY WILL BE REQUESTED TO CORRECT DEFICIENCIES WITHIN THIRTY (30) DAYS. SHOULD ANY CORRECTIVE ACTIONS BE NECESSARY, AND UPON REQUEST, SIEMENS WILL PROVIDE GUIDANCE IN AN EFFORT TO FACILITATE RESOLUTION. PLEASE BE ADVISED THAT AFTER 30 DAYS NOTICE ANY REPAIR OR MAINTENANCE SERVICES NECESSITATED BY SEVERE DEFICIENCIES WILL FALL OUTSIDE YOUR WARRANTY COVERAGE.

NOISE LEVEL

SYSTEM COMPONENT	DECIBEL LEVEL (AT 3'-3" DISTANCE)
GANTRY	<70
PATIENT TABLE	<64
PDC CABINET	≤55
IRS TOWER	≤55
HEAT EXCHANGER - WATER/AIR SPLIT	<60

STATE AGENCY REVIEW

PRIOR TO SIEMENS EQUIPMENT INSTALLATION, APPROVAL OF CONSTRUCTION OR STRUCTURAL MODIFICATIONS UTILIZING X-RAY FOR DIAGNOSTIC OR THERAPEUTIC PURPOSES, MUST BE OBTAINED BY THE CUSTOMER FROM THE APPROPRIATE STATE AGENCY, IF APPLICABLE.

ARCHITECTURAL NOTES

- ALL PRELIMINARY EQUIPMENT LAYOUTS SUBMITTED BY SIEMENS MEDICAL SOLUTIONS, INC. (SMS HEREAFER) ARE BASED ON THE RECOMMENDED SPACE NECESSARY FOR THE OPERATION AND SERVICEABILITY OF THE EQUIPMENT BEING PROPOSED. SMS WILL NOT SUBMIT AN EQUIPMENT LAYOUT THAT IS NOT IN THE BEST INTEREST OF BOTH THE CUSTOMER AND SMS. ALL EQUIPMENT LAYOUTS ARE BASED EITHER ON AN ACTUAL SITE LOCATION SURVEY OR ARCHITECTURAL DRAWINGS SUPPLIED TO SMS. SMS WILL NOT BE RESPONSIBLE FOR ANY ALTERATIONS THAT ENCROACH WITHIN DESIGNATED SAFETY AND SERVICE CLEARANCE ZONES AS INDICATED ON DRAWINGS (I.E. PIPE CHASES, VENTILATION DUCTS, CASEWORK, AND SOFFITS, ETC.) MADE BY THE CUSTOMER OR REQUIRED BY A CUSTOMER'S ARCHITECTURAL FIRM ONCE PRELIMINARY DRAWINGS HAVE BEEN SUBMITTED AND APPROVED. DO NOT ALTER ANY SPECIFICATIONS AND/OR DIMENSIONS WITHOUT CONTACTING AND RECEIVING WRITTEN CONFIRMATION FROM SMS PROJECT MANAGER.
- SMS IS NOT AN ARCHITECTURAL OR ENGINEERING FIRM. DRAWINGS SUPPLIED BY SMS ARE NOT CONSTRUCTION DRAWINGS. THEREFORE, THESE DRAWINGS ARE TO BE USED ONLY FOR INFORMATION TO COMPLEMENT ACTUAL CONSTRUCTION DRAWINGS AVAILABLE FROM A CUSTOMER APPOINTED ARCHITECTURAL REPRESENTATIVE OR A CUSTOMER'S ENGINEERING DESIGN GROUP. THE CUSTOMER'S ARCHITECT AND GENERAL CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE CODES AND PROFESSIONAL DESIGN REQUIREMENTS.
- THE CUSTOMER IS RESPONSIBLE FOR ALL ROOM AND AREA PREPARATION COSTS, PROFESSIONAL FEES, PERMITS, REPORTS, AND INSPECTION FEES.
- EQUIPMENT WARRANTIES, EXPRESSED OR IMPLIED ON THE PART OF SMS SHALL BE CONTINGENT UPON STRICT COMPLIANCE WITH THE ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL AND RECOMMENDATIONS AND REQUIREMENTS CONTAINED IN THESE DRAWINGS, UNLESS SPECIFIED OTHERWISE.
- ALL DIMENSIONS SHOWN ARE TAKEN FROM FINISHED SURFACES UNLESS SPECIFIED OTHERWISE.
- THIS DRAWING DOES NOT PROVIDE RADIATION SHIELDING REQUIREMENTS FOR X-RAY AND ASSOCIATED EQUIPMENT. THE CUSTOMER IS RESPONSIBLE FOR CONSULTING WITH A REGISTERED RADIATION PHYSICIST. ACTUAL PROTECTION REQUIREMENTS SHALL BE SPECIFIED BY A REGISTERED RADIATION PHYSICIST AT CUSTOMER'S ENGAGEMENT AND EXPENSE. RESPONSIBILITY FOR ALL INFORMATION AS TO THE ROOM LOCATION, USE, AND NUMBER OF ANTICIPATED EXAMINATIONS TO BE PERFORMED PER TIME PERIOD SHALL BE PROVIDED TO THE PHYSICIST BY THE CUSTOMER. THE CUSTOMER SHALL FURTHER TAKE ALL RESPONSIBILITY IN THE COMMUNICATION AND COORDINATION OF ACTIVITIES OF THE RADIATION PHYSICIST AND THE ARCHITECTURAL REPRESENTATIVE.
- SMS SHALL BE RESPONSIBLE FOR SMS EQUIPMENT INSTALLATION AND CALIBRATION, CONNECTION AND INSTALLATION OF SMS PROVIDED CABLES, AND CONNECTION OF CONTRACTOR PROVIDED WIRES TO SMS EQUIPMENT. IN THE EVENT THAT SPECIFIC TRADE RULES OR LICENSE REQUIREMENTS PROHIBIT THIS, THE CUSTOMER SHALL INITIATE THE SERVICES OF APPROVED OTHER CONTRACTORS AND PAY FOR SELECTED, APPROVED PARTIES TO PERFORM THIS WORK WITH JOB SUPERVISION TO BE PROVIDED BY SMS. CALIBRATION WHEN ACCOMPLISHED OUTSIDE OF NORMAL INSTALLATION SEQUENCES DUE TO CONTRACTOR OR TRADE RULE ACTIONS OR REQUIREMENTS SHALL BE SUPPORTED BY, CHARGED TO, AND ACCEPTED BY THE CUSTOMER AS AN ADDITIONAL INSTALLATION EXPENSE.
- THE CUSTOMER SHALL VERIFY WITH SMS PROJECT MANAGER FINAL INSTALLATION DRAWINGS THE LOCATION AND TRAVEL OF ALL AUXILIARY EQUIPMENT TO BE CEILING OR WALL MOUNTED (I.E. O.R. LIGHTS, MEDICAL GAS COLUMNS, PHYSIOLOGICAL MONITORING INJECTORS, CRT PLATFORMS, SPRINKLER HEADS, SMOKE DETECTORS, ELECTRICAL OUTLETS, HVAC GRILLES, SPEAKERS, AND GENERAL ROOM LIGHTING, ETC.).
- THE GENERAL CONTRACTOR/CUSTOMER SHALL BE RESPONSIBLE FOR ALL FINAL PAINT, TOUCH-UP AND ANY COSMETIC OR TRIM WORK WHICH NEEDS TO BE OR IS REQUIRED TO BE COMPLETED AFTER THE INSTALLATION OF THE SMS EQUIPMENT AND ANY ASSOCIATED SUPPORT APPARATUS.

SITE READINESS GUIDELINES

- THE FOLLOWING GENERAL CONDITIONS ARE NECESSARY TO HAVE THE STATUS OF "READY SITE".
- PROPER POWER AVAILABLE AT SIEMENS EQUIPMENT POWER CABINET LOCATION AND ALL POWER OUTLETS FUNCTIONING.
 - AIR CONDITIONING/HUMIDIFICATION SYSTEMS COMPLETE, TESTED, AND FUNCTIONING PROPERLY ACCORDING TO SIEMENS SPECIFICATIONS.
 - PROPER LIGHTING INSTALLED AND FUNCTIONING.
 - PLUMBING COMPLETE EXCEPT FOR ANY FINAL CONNECTIONS TO SIEMENS EQUIPMENT.
 - ALL CABLE TRAYS/DUCTS/CONDUITS CORRECTLY SIZED, LOCATED, AND INSTALLED ACCORDING TO THE SIEMENS DRAWINGS.
 - ALL REINFORCEMENT PLATES/UNISTRUT INSTALLED AS REQUIRED.
 - ROOM FOR EQUIPMENT INSTALLATION AND IMMEDIATE VICINITY IS DUST-FREE AND IS TO REMAIN SO FOR THE DURATION OF THE INSTALLATION.
 - A SECURE AREA (APPROXIMATELY 10' x 10') IS AVAILABLE AT EQUIPMENT DELIVERY FOR PARTS AND INSTALLATION TOOLS.
 - CUSTOMER SUPPLIED CAMERAS AND PROCESSORS INSTALLED.
 - CUSTOMER APPROVAL FOR SIEMENS REMOTE SERVICES (SRS) CONNECTION, AND CUSTOMER'S I.T. CONTACT INFORMATION AND IP ADDRESSES ESTABLISHED.
 - WALLS TO BE PRIMED AND PAINTED, FLOORS TO BE TILED EXCEPT IN AREAS OF THE EQUIPMENT BASE PLATES.
- IF THESE CONDITIONS ARE NOT MET, THE SIEMENS PROJECT MANAGER AND THE DESIGNATED SIEMENS INSTALLATION SUPERVISOR SHALL RESCHEDULE THE INSTALLATION START DATE. NOTE: ADDITIONAL COST MAY BE INCURRED BY THE CUSTOMER/CONTRACTOR AND DELIVERY DATES MAY NEED TO BE RESCHEDULED, WHEN THE SIEMENS SITE READINESS GUIDELINES ARE NOT MET.

RESOURCE LIST (SMS USE ONLY)

DESIGNATION	PG NUMBER	DATE
SOMATOM FORCE	C2-058.891.01.02.02	03.14
COMMON CT	CT00-000.891.04.03.02	10.13
COMMON OPTIONS CT	CT00-000.891.03.23.02	03.14

FORCE
REV 0

FINISHED ROOM HEIGHT

FOR CT GANTRY ONLY	MINIMUM 7'-6 9/16"
CAREVISION MONITOR/CEILING MOUNT	MIN. 9'-2 5/8" MAX. 11'-2 5/8"

ATTENTION:

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-THIS SET OF PLANS REPRESENTS A COMPLETE SET OF DETAILS AND SHOULD NOT BE SEPARATED.

-IT IS RECOMMENDED THAT THE SIEMENS DRAWINGS BE INCORPORATED WITH THE CONSTRUCTION DOCUMENTS FOR REFERENCE.

-ALL DIMENSIONS SHOWN ON THIS DRAWING ARE FROM FINISHED SURFACES.

-THIS DRAWING DOES NOT PROVIDE RADIATION SHIELDING REQUIREMENTS FOR X-RAY AND ASSOCIATED EQUIPMENT. THE CUSTOMER IS RESPONSIBLE FOR CONSULTING WITH A REGISTERED RADIATION PHYSICIST TO SPEEDY RADIATION PROTECTION.

PROJECT MANAGER: JASON AXELROD
TEL: (415) 361-9137 EXT:
FAX:
EMAIL: jason.axelrod@siemens.com

SIEMENS

PALO ALTO DIVISION VAMC

3801 MIRANDA AVE (04D), PALO ALTO, CA 94304

CT SUITE E2-453 - SOMATOM FORCE

PROJECT #:

1401829

SHEET:

A-101

SHEET 1 OF 8

DRAWN BY: J. DRAMS

DATE: 08/12/14

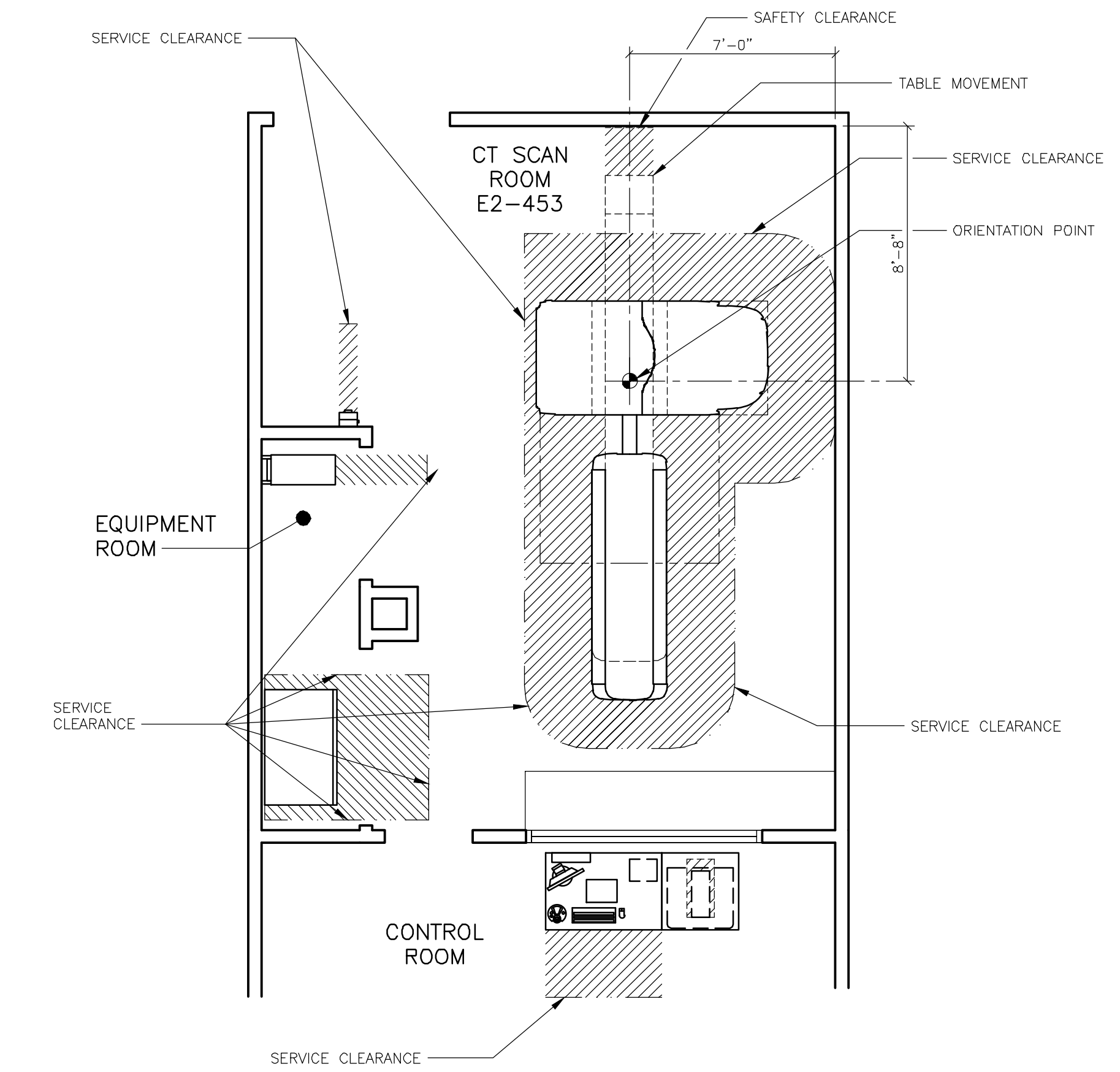
DATE: 08/12/14

DESCRIPTION: R-101RA VERSION DATED 05/30/14 APPROVED BY CUSTOMER FOR FINALS

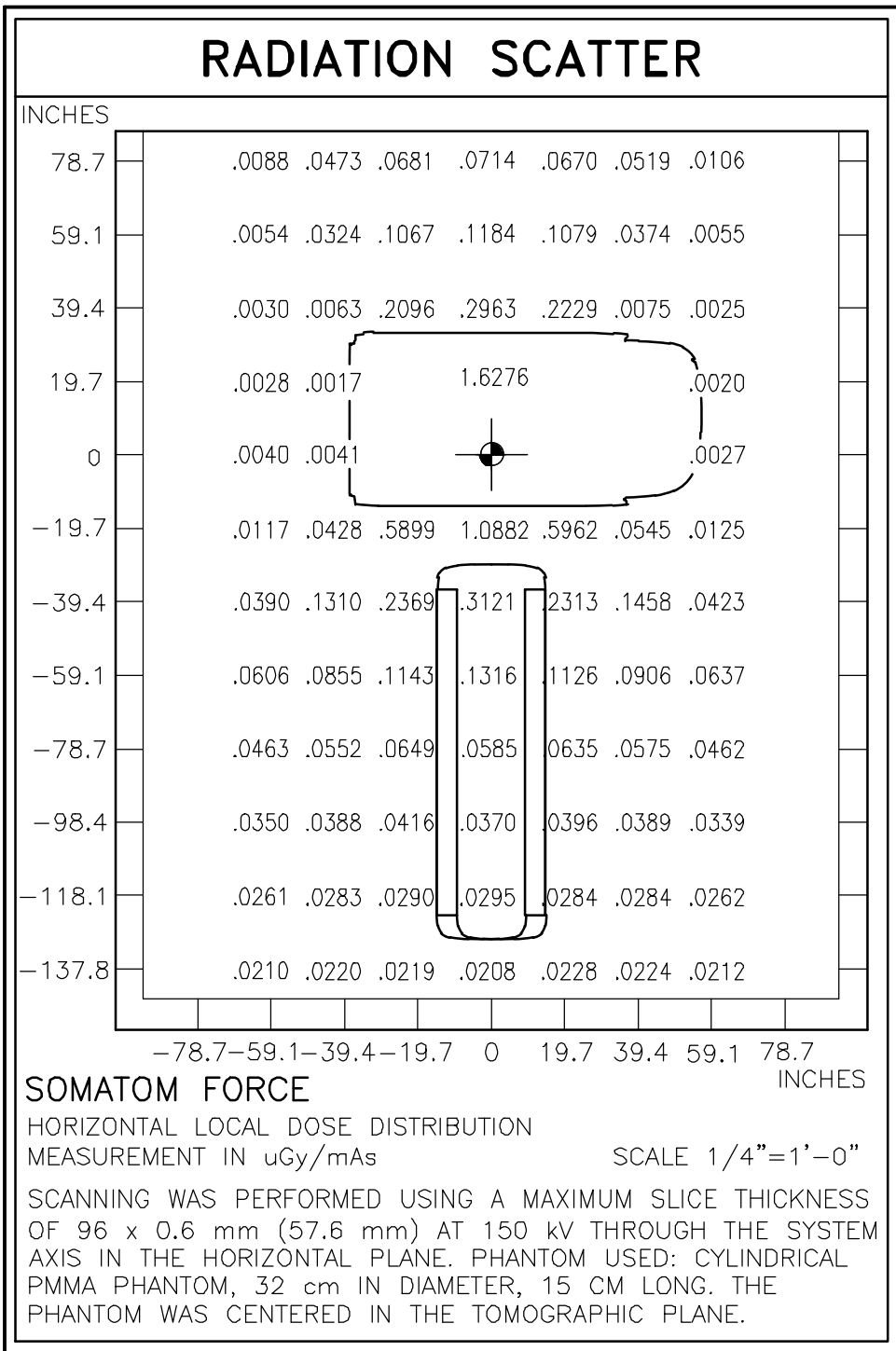
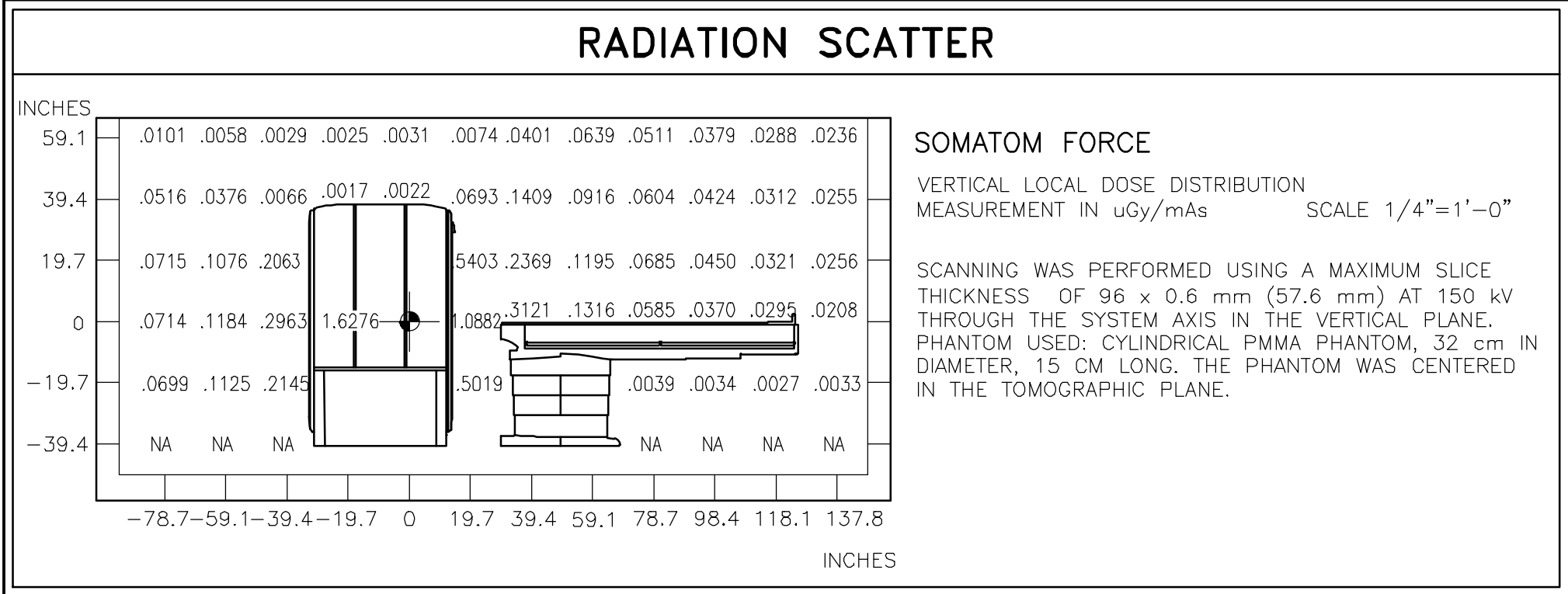
SYMBOL: -ISSUE BLOCK-

SCALE: AS NOTED

REF. #1-91J713



SAFETY/SERVICE CLEARANCE PLAN
SCALE: 1/4" = 1'-0"



SAFETY CLEARANCE NOTE

IF THE SAFETY DISTANCES ARE NOT OBSERVED, SAFETY MEASURES IN ACCORDANCE WITH LOCAL CODES SHOULD BE UTILIZED (FOR EXAMPLE BARRIERS, WARNING SIGNS, AND SAFETY MATS).

SIEMENS REMOTE SERVICES (SRS)

TO ENSURE THE UPTIME OF YOUR SYSTEM DURING THE WARRANTY PERIOD (AND BEYOND WITH A SERVICE AGREEMENT), SIEMENS REMOTE SERVICES (SRS) REQUIRES REMOTE LOCAL AREA NETWORK ACCESS TO SIEMENS SYSTEMS.

SRS REQUIRES ONE OF THE FOLLOWING CONNECTION METHODS:

(PREFERRED) VPN CONNECTION

THE PREFERRED CONNECTION METHOD IS (VPN) VIRTUAL PRIVATE NETWORK (WHERE THE CUSTOMER HAS AVAILABLE A VPN CAPABLE FIREWALL OR OTHER VPN APPLIANCE). THIS METHOD PROVIDES THE POSSIBILITY FOR REMOTE SYSTEM DIAGNOSTICS WITHOUT ADDITIONAL HARDWARE. PLEASE CONTACT SIEMENS REMOTE SERVICES (800-888-SIEM) TO DETERMINE IF THIS METHOD IS SUITABLE FOR YOUR SITE.

(OPTIONAL) SRS ROUTER CONNECTION

- THE SRS ROUTER IS SUPPLIED BY SIEMENS AND INSTALLED AT THE CUSTOMER'S SITE, WHILE STILL REMAINING THE PROPERTY OF SIEMENS. THE CUSTOMER'S NETWORK ADMINISTRATOR AND SIEMENS REMOTE SERVICES SHALL DETERMINE THE TYPE AND LOCATION OF THE SRS ROUTER REQUIRED.
- THE SRS ROUTER IS CONNECTED TO AN ANALOG MODEM THAT IS SUPPLIED BY SIEMENS, WHICH THEN IN TURN IS CONNECTED TO AN ANALOG PHONE LINE THAT IS SUPPLIED BY THE CUSTOMER. ONE SRS ROUTER ALLOWS REMOTE DIAGNOSTICS TO MULTIPLE MEDICAL SYSTEMS.
- THE SRS ROUTER SHOULD BE INSTALLED IN A SECURE LOCATION (CUSTOMER'S NETWORK COMPUTER ROOM) THAT HAS LIMITED ACCESS. IT CAN BE LOCATED ON A SHELF, TABLE, OR IN A CABINET. THE CONNECTION CABLES (WITH INDICATED LENGTHS BELOW) ARE INCLUDED WITH DELIVERY.

SRS ROUTER CONNECTION DIAGRAM

NOTE: ALL POWER OUTLETS ARE SUPPLIED/INSTALLED BY CUSTOMER.

- 1 ETHERNET SWITCH OR HUB, SUPPLIED BY CUSTOMER
- 2 SRS ROUTER, SUPPLIED BY SIEMENS (SIZE: 11.2"W x 8.7"D x 5.5"H, WEIGHT: 2 LBS.)
- 3 ANALOG MODEM, SUPPLIED BY SIEMENS
- 4 ANALOG PHONE LINE, SUPPLIED BY CUSTOMER

* OPTIONAL SWITCH AND CABLES ARE NOT INCLUDED, BUT CAN BE ORDERED FROM SIEMENS.

SIEMENS REMOTE SERVICE SCALE: NONE

FINISHED ROOM HEIGHT	
FOR CT GANTRY ONLY	MINIMUM 7'-6 9/16"
CAREVISION MONITOR/CEILING MOUNT	MIN. 9'-2 5/8" MAX. 11'-2 5/8"

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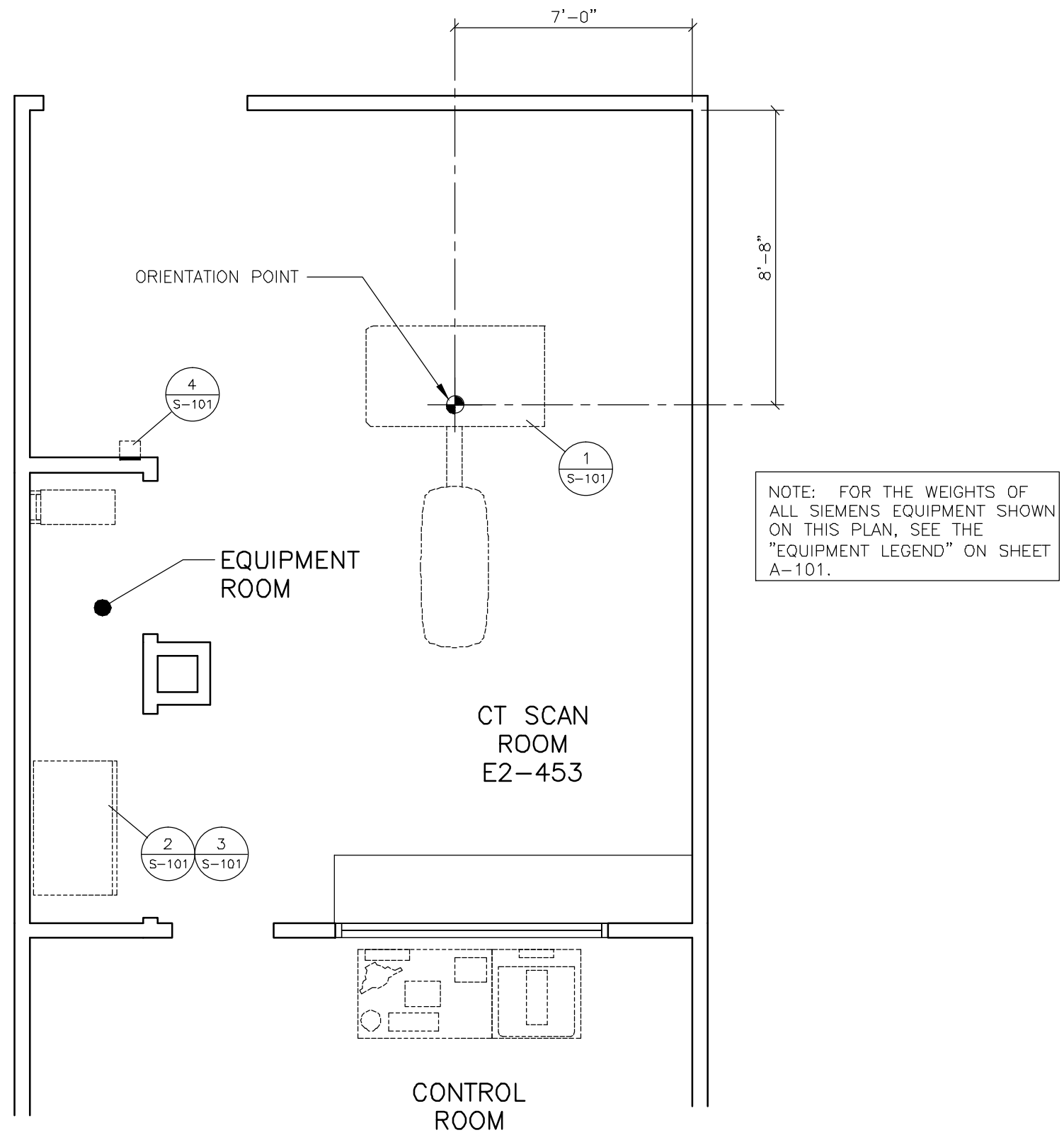
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		PROJECT MANAGER: JASON AXELROD TELL: (415) 361-9137 EXT: VMAIL: FAX: EMAIL: jason.axelrod@siemens.com	
		SIEMENS	
		PALO ALTO DIVISION VAMC	
		3801 MIRANDA AVE (04D), PALO ALTO, CA 94304 CT SUITE E2-453 — SOMATOM FORCE	
		THE USE OR REPRODUCTION OF THIS TITLE BLOCK WITHOUT SIEMENS' AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW.	
		ALL RIGHTS ARE RESERVED.	
		SCALE: AS NOTED REF. #1-91J713	
		DATE: 08/12/14	

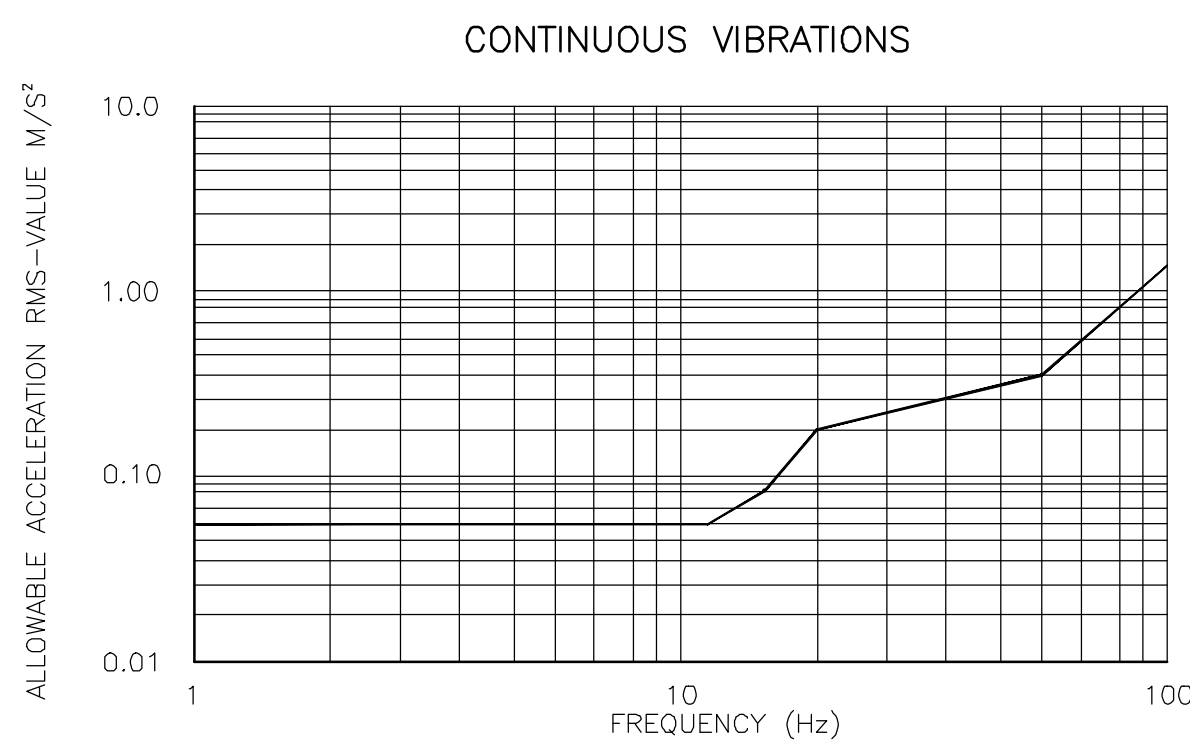
PROJECT #:		SHEET:	
1401829		A-102	
SHEET 2 OF 8		DRAWN BY: J. DRAMS	



STRUCTURAL FLOOR PLAN

SCALE: 1/4" = 1'-0"

FLOOR AND BUILDING VIBRATIONS



THRESHOLD VALUES OF ALLOWABLE ACCELERATION (RMS VALUE OF 1 Hz RESOLUTION FFT)

FREQUENCY (Hz)	ACCELERATION RMS (M/S²)
1	0.020
2	0.022
3	0.024
4	0.025
5	0.026
6	0.027
7	0.027
8	0.028
9	0.029
10	0.029
11	0.030
12	0.030
13	0.034
14	0.039
15	0.043
16	0.048

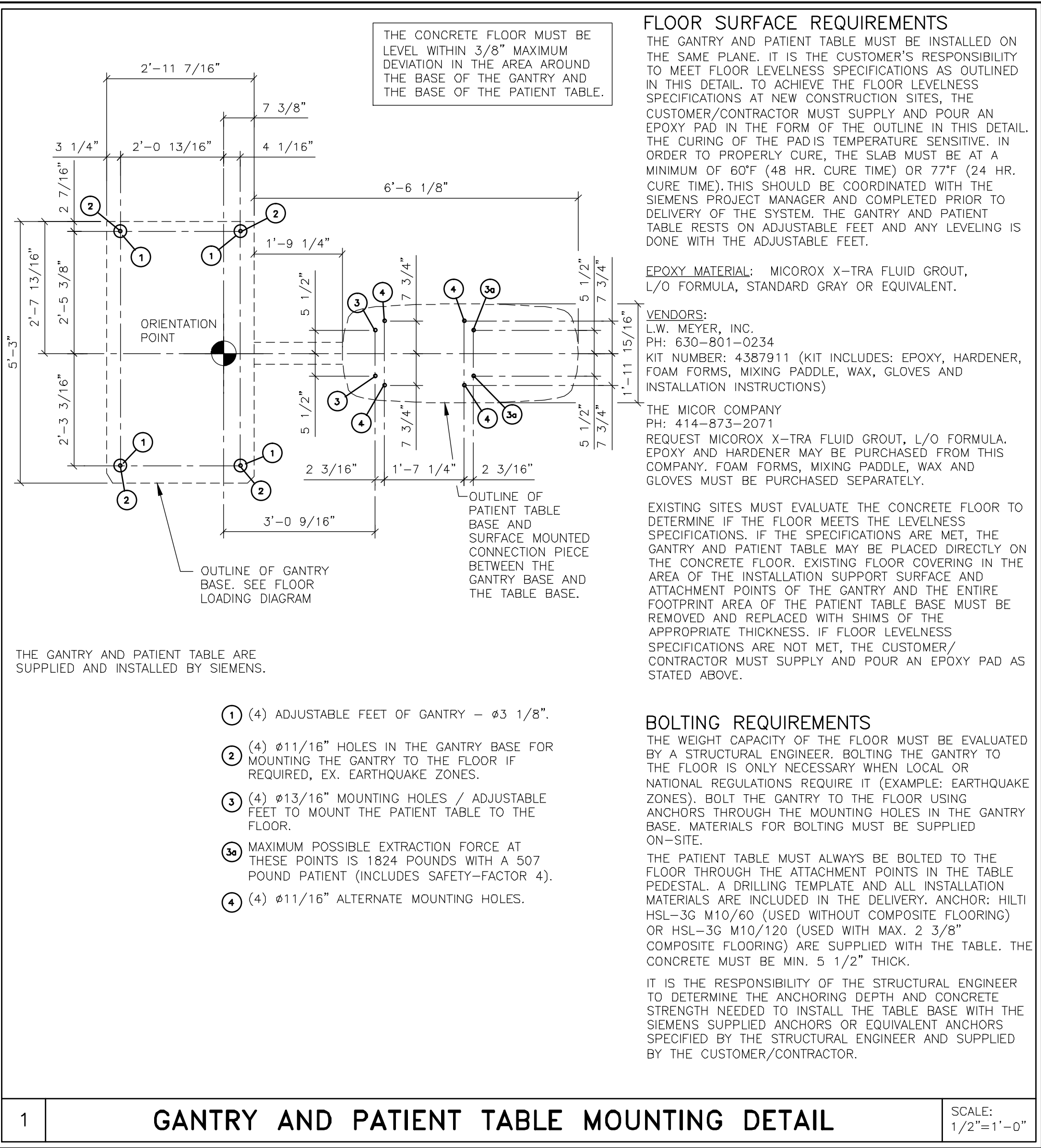
FREQUENCY (Hz)	ACCELERATION RMS (M/S²)
17	0.053
18	0.059
19	0.064
20	0.070
25	0.079
30	0.086
35	0.093
40	0.100
45	0.122
50	0.146
55	0.172
60	0.200
80	0.300
100	0.400

TRANSIENT VIBRATIONS (SHOCKS)

ANY TRANSIENT VIBRATION HAS TO BE LESS THAN 0.5 M/S² PEAK-TO-PEAK IN THE TIME DOMAIN. THE VIBRATIONS HAVE TO BE MEASURED WITH A SAMPLING RATE OF 1000Hz.

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FLOOR SURFACE REQUIREMENTS

THE GANTRY AND PATIENT TABLE MUST BE INSTALLED ON THE SAME PLANE. IT IS THE CUSTOMER'S RESPONSIBILITY TO MEET FLOOR LEVELNESS SPECIFICATIONS AS OUTLINED IN THIS DETAIL. TO ACHIEVE THE FLOOR LEVELNESS SPECIFICATIONS AT NEW CONSTRUCTION SITES, THE CUSTOMER/CONTRACTOR MUST SUPPLY AND POUR AN EPOXY PAD IN THE FORM OF THE OUTLINE IN THIS DETAIL. THE CURING OF THE PAD IS TEMPERATURE SENSITIVE. IN ORDER TO PROPERLY CURE, THE SLAB MUST BE AT A MINIMUM OF 60°F (48 HR. CURE TIME) OR 77°F (24 HR. CURE TIME). THIS SHOULD BE COORDINATED WITH THE SIEMENS PROJECT MANAGER AND COMPLETED PRIOR TO DELIVERY OF THE SYSTEM. THE GANTRY AND PATIENT TABLE RESTS ON ADJUSTABLE FEET AND ANY LEVELING IS DONE WITH THE ADJUSTABLE FEET.

EPOXY MATERIAL: MICOROX X-TRA FLUID GROUT, L/O FORMULA, STANDARD GRAY OR EQUIVALENT.

VENDORS:
L.W. MEYER, INC.
PH: 630-801-0234
KIT NUMBER: 4387911 (KIT INCLUDES: EPOXY, HARDENER, FOAM FORMS, MIXING PADDLE, WAX, GLOVES AND INSTALLATION INSTRUCTIONS)

THE MICOR COMPANY
PH: 414-873-2200
REQUEST MICOROX X-TRA FLUID GROUT, L/O FORMULA, EPOXY AND HARDENER MAY BE PURCHASED FROM THIS COMPANY. FOAM FORMS, MIXING PADDLE, WAX AND GLOVES MUST BE PURCHASED SEPARATELY.

EXISTING SITES MUST EVALUATE THE CONCRETE FLOOR TO DETERMINE IF THE FLOOR MEETS THE LEVELNESS SPECIFICATIONS. IF THE SPECIFICATIONS ARE MET, THE GANTRY AND PATIENT TABLE MAY BE PLACED DIRECTLY ON THE CONCRETE FLOOR. EXISTING FLOOR COVERING IN THE AREA OF THE INSTALLATION SUPPORT SURFACE AND ATTACHMENT POINTS OF THE GANTRY AND THE ENTIRE FOOTPRINT AREA OF THE PATIENT TABLE BASE MUST BE REMOVED AND REPLACED WITH SHIMS OF THE APPROPRIATE THICKNESS. IF FLOOR LEVELNESS SPECIFICATIONS ARE NOT MET, THE CUSTOMER/CONTRACTOR MUST SUPPLY AND POUR AN EPOXY PAD AS STATED ABOVE.

BOLTING REQUIREMENTS

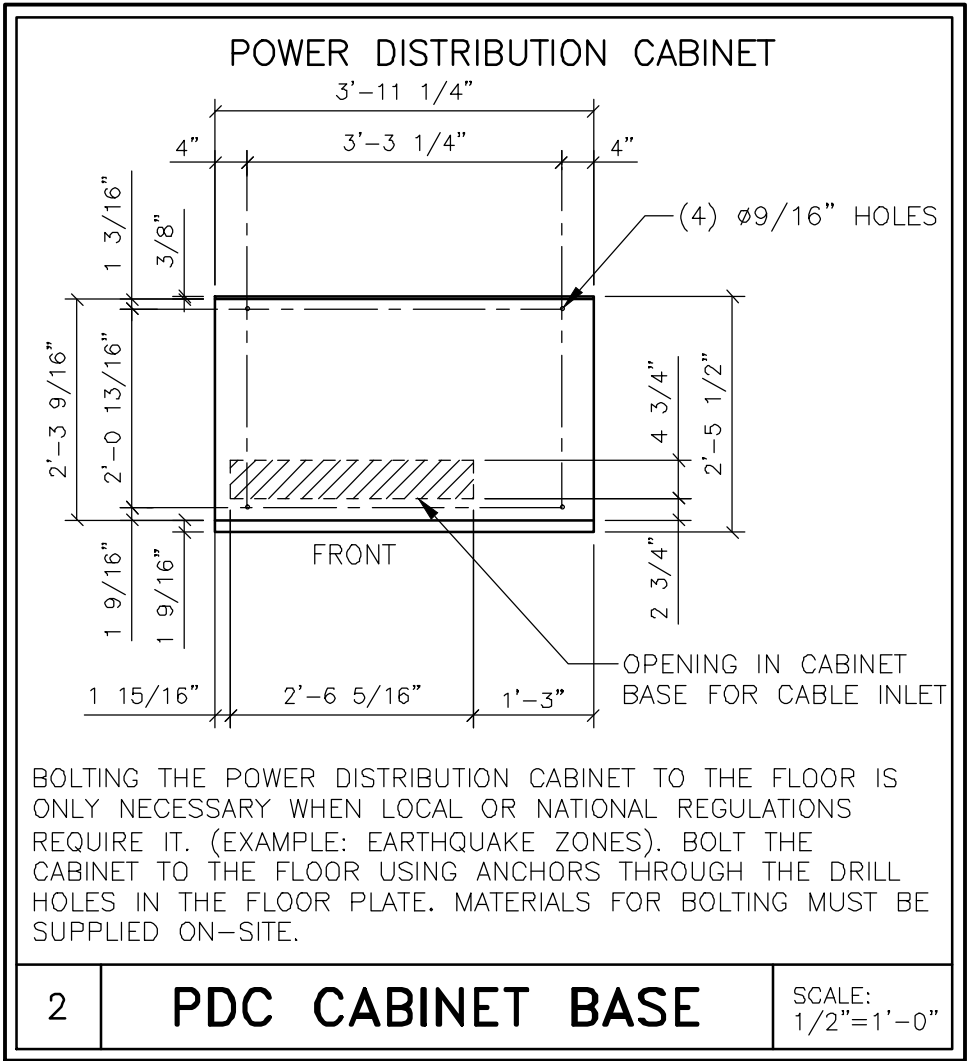
THE WEIGHT CAPACITY OF THE FLOOR MUST BE EVALUATED BY A STRUCTURAL ENGINEER. BOLTING THE GANTRY TO THE FLOOR IS ONLY NECESSARY WHEN LOCAL OR NATIONAL REGULATIONS REQUIRE IT (EXAMPLE: EARTHQUAKE ZONES). BOLT THE GANTRY TO THE FLOOR USING ANCHORS THROUGH THE MOUNTING HOLES IN THE GANTRY BASE. MATERIALS FOR BOLTING MUST BE SUPPLIED ON-SITE.

THE PATIENT TABLE MUST ALWAYS BE BOLTED TO THE FLOOR THROUGH THE ATTACHMENT POINTS IN THE TABLE PEDESTAL. A DRILLING TEMPLATE AND ALL INSTALLATION MATERIALS ARE INCLUDED IN THE DELIVERY. ANCHOR: HILTI HSL-30 M10/60 (USED WITHOUT COMPOSITE FLOORING) OR HSL-30 M10/120 (USED WITH MAX. 2 3/8\"/>

IT IS THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER TO DETERMINE THE ANCHORING DEPTH AND CONCRETE STRENGTH NEEDED TO INSTALL THE TABLE BASE WITH THE SIEMENS SUPPLIED ANCHORS OR EQUIVALENT ANCHORS SPECIFIED BY THE STRUCTURAL ENGINEER AND SUPPLIED BY THE CUSTOMER/CONTRACTOR.

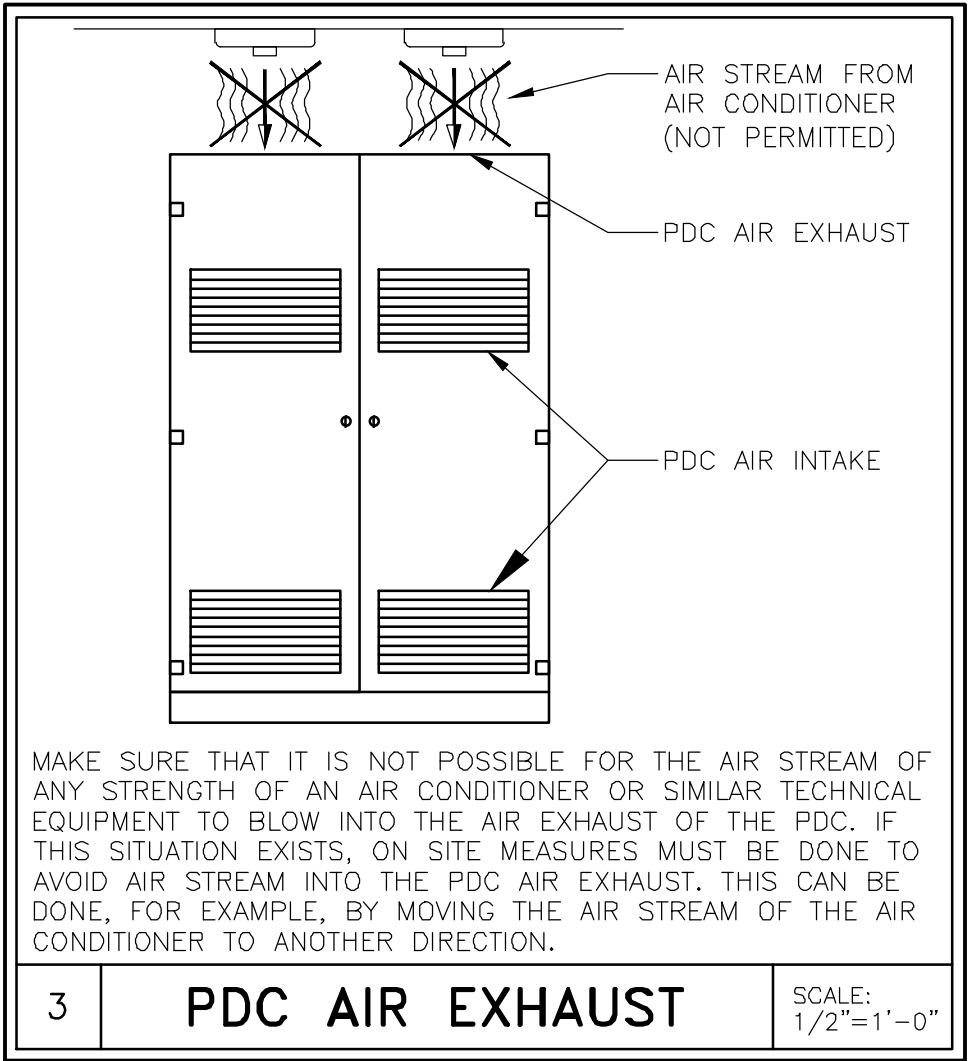
GANTRY AND PATIENT TABLE MOUNTING DETAIL

SCALE: 1/2"=1'-0"



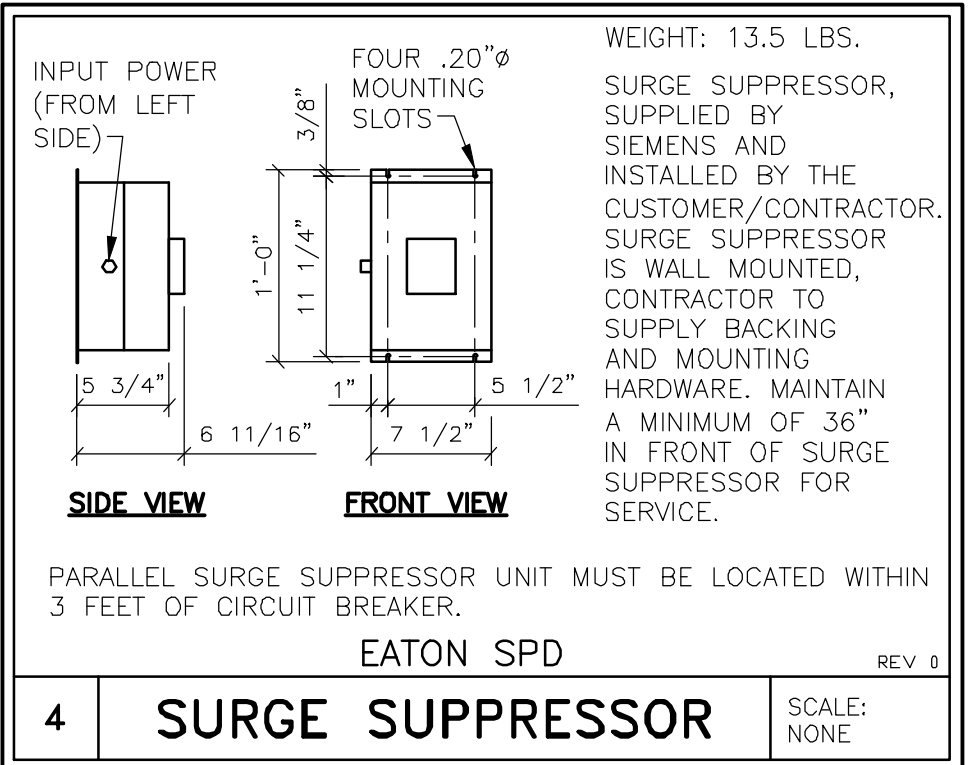
POWER DISTRIBUTION CABINET

BOLTING THE POWER DISTRIBUTION CABINET TO THE FLOOR IS ONLY NECESSARY WHEN LOCAL OR NATIONAL REGULATIONS REQUIRE IT. (EXAMPLE: EARTHQUAKE ZONES). BOLT THE CABINET TO THE FLOOR USING ANCHORS THROUGH THE DRILL HOLES IN THE FLOOR PLATE. MATERIALS FOR BOLTING MUST BE SUPPLIED ON-SITE.



PDC AIR EXHAUST

SCALE: 1/2"=1'-0"



PARALLEL SURGE SUPPRESSOR UNIT MUST BE LOCATED WITHIN 3 FEET OF CIRCUIT BREAKER.

EATON SPD

SURGE SUPPRESSOR

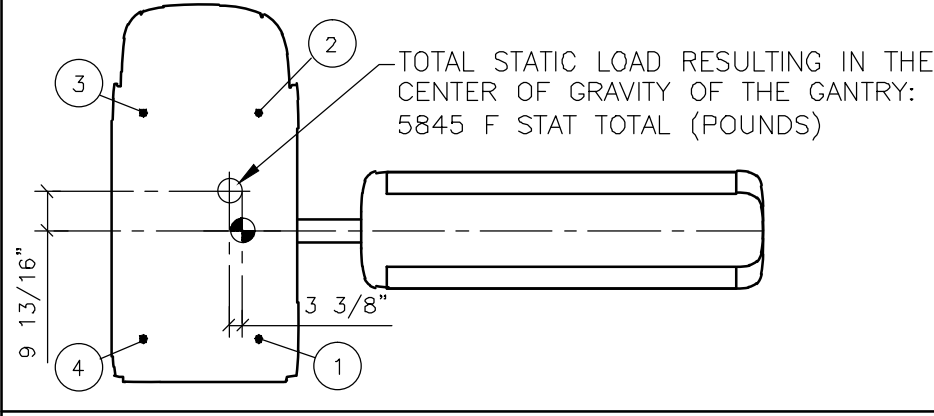
SCALE: NONE

STRUCTURAL NOTES

- 1) THE CUSTOMER/CONTRACTOR SHALL FURNISH AND INSTALL ALL STRUCTURAL SUPPORT MEMBERS AND NEEDED HARDWARE FOR THE INSTALLATION OF THE SIEMENS EQUIPMENT.
- 2) THE OVERHEAD STRUCTURAL SUPPORT SYSTEM SHALL BE FIXED, RIGID AND BRACED FOR SWAY.
- 3) ALL STRUCTURAL SUPPORT MEMBERS SHALL BE TRUE, SQUARE, LEVEL, PARALLEL AND COPLANAR WITH RESPECT TO EACH OTHER, WITH A HORIZONTAL STRUCTURAL SUPPORT MEMBER TO BE LOCATED AND SET WITH A TRANSIT.
- 4) ALL STRUCTURAL SUPPORT DETAILS SHOWN ARE SAMPLE DETAILS BASED UPON TYPICAL AND STANDARD BUILDING PRACTICES AND ARE NOT INTENDED AS ACTUAL CONSTRUCTION DETAILS. ALL CONSTRUCTION DETAILS AND SUPPORT CALCULATIONS SHALL BE PREPARED BY A PROFESSIONAL STRUCTURAL ENGINEER AT THE CUSTOMER'S EXPENSE. IN THE EVENT AN EXISTING SUPPORT SYSTEM IS TO BE USED, IT WILL BE THE CUSTOMER'S RESPONSIBILITY TO VERIFY THE INTEGRITY OF THAT SYSTEM.
- 5) WHERE SHOWN ON THE 1/4" STRUCTURAL FLOOR PLAN, THERE ARE ON OCCASION MOUNTING FRAMES FURNISHED BY SMS. THESE FRAMES ARE TO BE SET BY THE CONTRACTOR, UNDER THE SUPERVISION OF SMS PERSONNEL. THE CUSTOMER/CONTRACTOR IS RESPONSIBLE FOR ALL FRAMES INSTALLED BY HIM TO BE WATER LEVEL AND ANCHORED PROPERLY.
- 6) ALL CEILING FIXTURES (I.E. AIR SUPPLY GRILLES, AIR RETURN GRILLES, EXHAUST GRILLES, SPRINKLER HEADS, INCANDESCENT AND FLUORESCENT LIGHT FIXTURES, INTERCOM SPEAKERS, MEDICAL GAS COLUMNS, ETC.) SHALL BE INSTALLED FLUSH MOUNTED WITH THE FINISHED CEILING TO PROVIDE FREE AND UNRESTRICTED TRAVEL OF THE SMS CEILING MOUNTED EQUIPMENT.
- 7) THE BOTTOM SIDE OF THE UNISTRUT CEILING GRID AND ANY CEILING MOUNTED SUPPORT PLATES ARE TO BE INSTALLED FLUSH WITH THE FINISHED CEILING. THE CUSTOMER/CONTRACTOR SHALL ALSO PROVIDE COVERSTRIPS FOR THE UNISTRUT.
- 8) THE STRUCTURAL PLANNING AS SHOWN ON THE 1/4" STRUCTURAL PLAN HAS BEEN COORDINATED WITH THE EQUIPMENT LOCATION AS SHOWN ON THE 1/4" EQUIPMENT LAYOUT PLAN. FOR THIS REASON, ANY DEVIATIONS FROM THE STRUCTURAL PLANNING AS SHOWN MUST BE APPROVED BY SMS PLANNING DEPARTMENT.
- 9) THE STRUCTURAL ENGINEER OF RECORD SHALL BE RESPONSIBLE FOR THE DESIGN AND DETAIL OF FLOOR, WALL AND CEILING STRUCTURES IN ACCORDANCE WITH THE WEIGHTS, MOMENTS AND FORCES AS SHOWN ON OUR STRUCTURAL CALCULATIONS, OR INFORMATION, IN CONSIDERATION OF FORCES AS DETERMINED PER LOCAL GOVERNING BUILDING CODES.

FLOOR LOADING

DESCRIPTION			
F STAT MAX	STATIC FLOOR LOADING DUE TO GANTRY'S OWN WEIGHT		
AMPLITUDE	DIFFERENCE BETWEEN MINIMUM AND MAXIMUM FLOOR LOADING DURING GANTRY ROTATION		
MEASUREMENT POINTS			
ADJUSTABLE FOOT	F STAT MAX (POUNDS)	AMPLITUDE FOR F DYN (POUNDS)	BEARING AREA PER ADJUSTABLE FOOT
①	1393	±202	8 IN ²
②	1641	±202	
③	1529	±225	
④	1281	±225	



NOTE:

- 1) THE VALUES PROVIDED FOR FLOOR LOADING APPLY ONLY IF THE GANTRY IS SATISFACTORILY LEVELED.
- 2) THE FLOOR STRUCTURE MUST BE CAPABLE OF WITHSTANDING THE OCCUPIED WEIGHT OF THE GANTRY AND THE INDIVIDUAL CONTACT AREA LOADING.

FORCE
REV 0

SIEMENS

PALO ALTO DIVISION VAMC

3801 MIRANDA AVE (04D), PALO ALTO, CA 94304

CT SUITE E2-453 - SOMATOM FORCE

PROJECT #:

1401829

SHEET 3 OF 8

DRAWN BY: J. DRAMS

DATE: 08/12/14

S-101

THE USE OR REPRODUCTION OF THIS TITLE BLOCK WITHOUT SIEMENS AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW.

ALL RIGHTS ARE RESERVED.

SCALE: AS NOTED

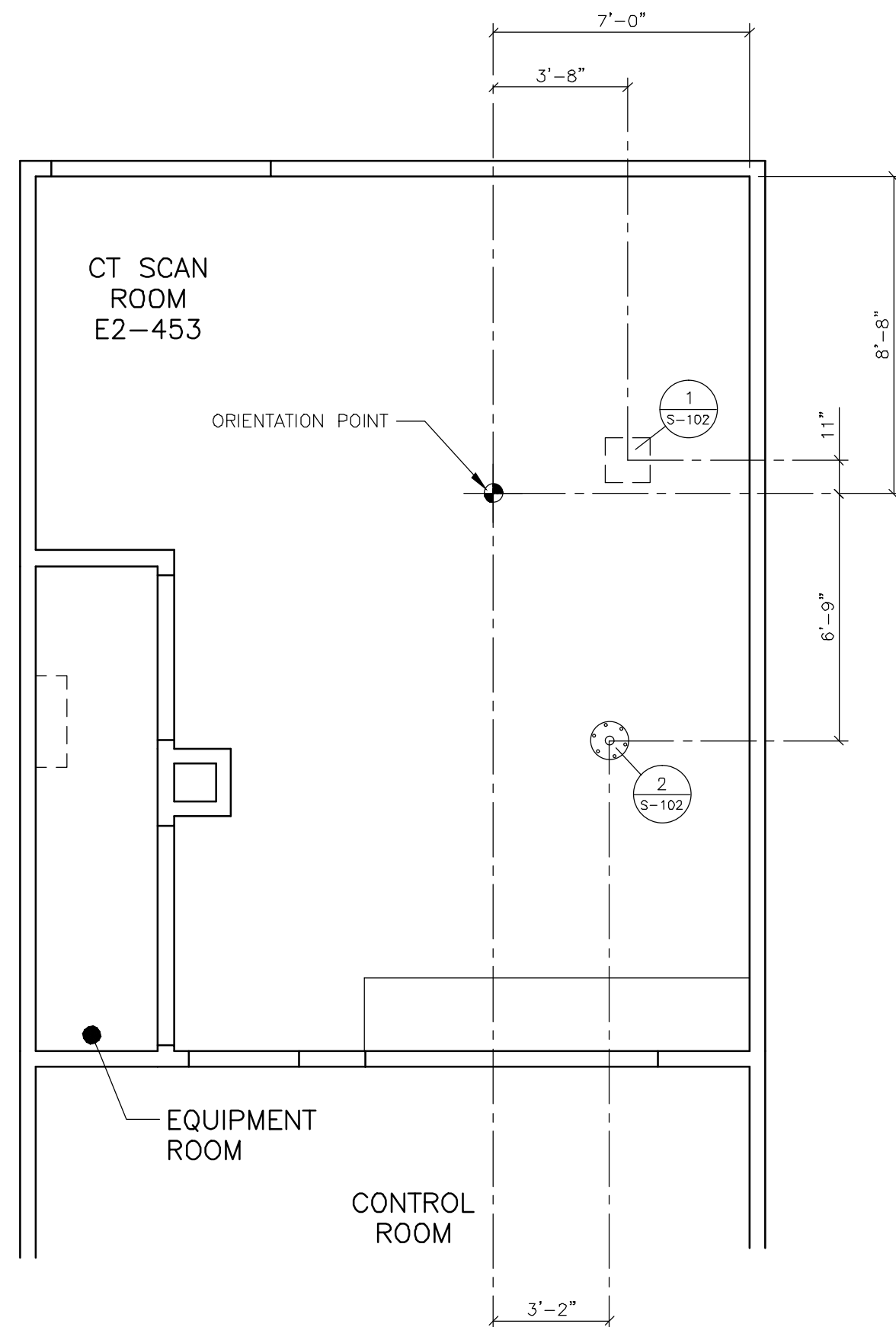
REF. #1-91J713

SYM	DATE	DESCRIPTION
08/12/14	R-101RA VERSION DATED 05/30/14 APPROVED BY CUSTOMER FOR FINALS	
-ISSUE BLOCK-		

FINISHED ROOM HEIGHT	
FOR CT GANTRY ONLY	MINIMUM 7'-6 9/16"
CAREVISION MONITOR/CEILING MOUNT	MIN. 9'-2 5/8" MAX. 11'-2 5/8"

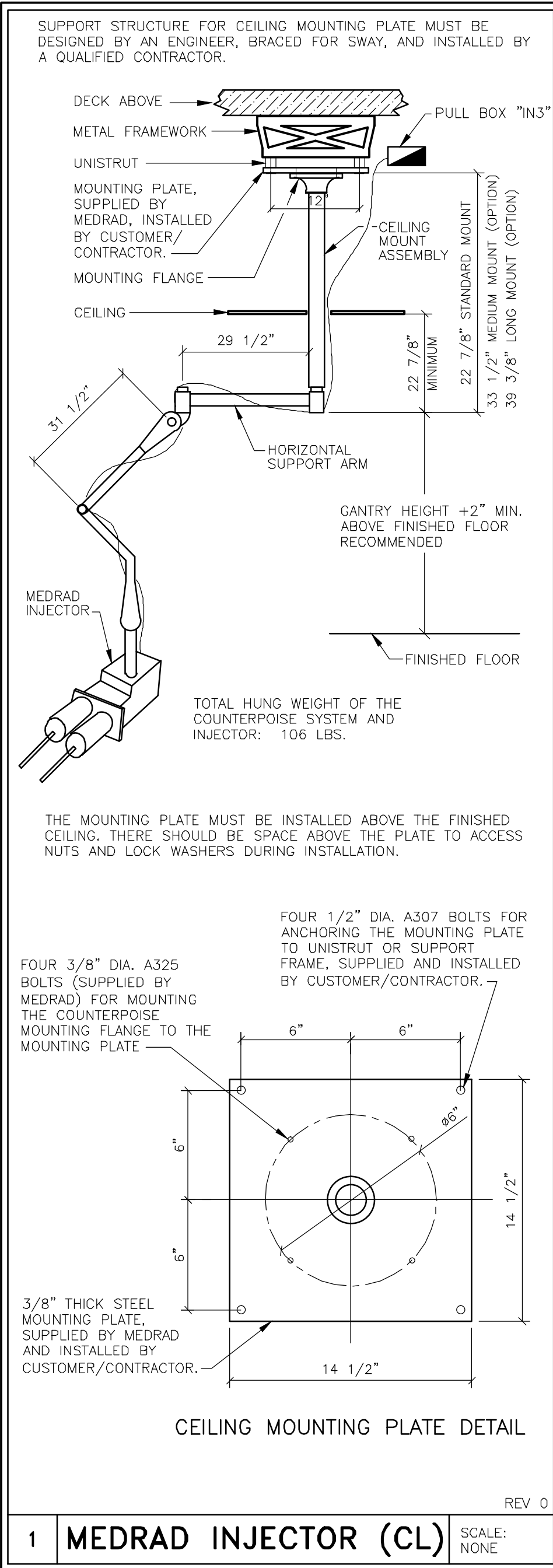
— IT IS RECOMMENDED THAT THE SIEMENS DRAWINGS BE INCORPORATED WITH THE CONSTRUCTION DOCUMENTS FOR REFERENCE.

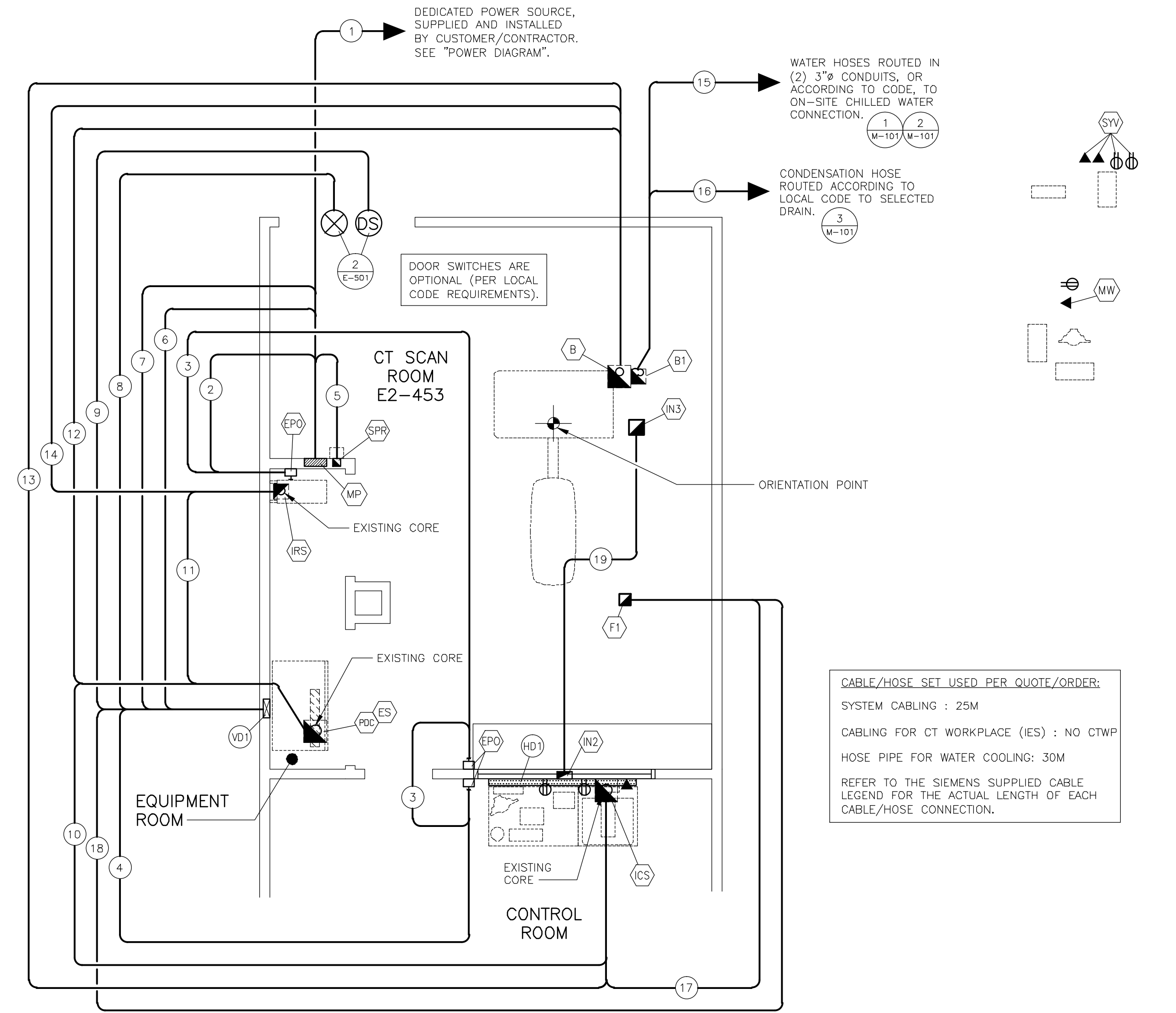
— ALL DIMENSIONS SHOWN ON THIS DRAWING ARE FROM FINISHED SURFACES.
— THIS DRAWING DOES NOT PROVIDE RADIATION SHIELDING REQUIREMENTS FOR X-RAY AND ASSOCIATED EQUIPMENT. THE CUSTOMER IS RESPONSIBLE FOR CONSULTING WITH A REGISTERED RADIATION PHYSICIST TO SPECIFY RADIATION PROTECTION.



STRUCTURAL CEILING PLAN

SCALE: 1/4" = 1'-0"





ELECTRICAL RACEWAY PLAN

SCALE: 1/4" = 1'-0"

SYMBOLS	
ALL MAY NOT APPLY	
	MAIN PANEL OR ENCLOSURE BY CUSTOMER/CONTRACTOR
	OPENING IN RACEWAY OR TRENCH/DUCT
	PULL BOX IN (FLOOR/WALL/CEILING)
	OPENING IN ACCESS FLOORING
	WARNING LIGHT (X-RAY ON)
	DOOR SAFETY SWITCH
	(EPO) EMERGENCY POWER OFF BUTTON
	TRENCH DUCT
	CEILING DUCT
	UNDER FLOOR DUCT
	SURFACE DUCT
	VERTICAL DUCT
	ETHERNET CONNECTION TO CUSTOMER'S INFORMATION SYSTEMS NETWORK (VERIFY WITH SMS PROJECT MANAGER).
	110 VOLT, 20 AMP, HOSPITAL GRADE DUPLEX OUTLET UNLESS OTHERWISE STATED.

SIEMENS SUPPLIED CABLES				
FROM	VIA	TO	DESCRIPTION	REMARKS
PDC	10	ICS	POWER CABLE; W8:300V, W34:600V DATA CABLE; W61:CAT5 ,W63:CAT 5	MAXIMUM LENGTH 82'-0"
PDC	11	IRS	POWER CABLE; W7:300V, W33:600V DATA CABLE; W57:CAT5, W65:CAT5	MAXIMUM LENGTH 82'-0"
PDC	12	B	POWER CABLE; W1:600V, W2:600V, W3:300V, W4:2000V, W9:300V, W54:300V PE CABLE & CONTROL CABLE; W30:600V, W59:600V DATA CABLE; W53:CAT5, W74:FIBER	MAXIMUM LENGTH 82'-0"
B	13	ICS	CONTROL CABLE; W51:300V	MAXIMUM LENGTH 82'-0"
B	14	IRS	DATA CABLE; W70:FIBER, W78:FIBER, W98:FIBER	MAXIMUM LENGTH 82'-0"
ON-SITE WATER CONN.	15	B1	WATER HOSES	MAXIMUM LENGTH 96'-0"
B1	16	DRAIN	CONDENSATION HOSE	MAXIMUM LENGTH 32'-9"
ICS	17	F1	CONTROL CABLE	MAXIMUM LENGTH 82'-0"
PDC	VD1,18	F1	POWER CABLE	MAXIMUM LENGTH 68'-0"
IN2	19	IN3	INJECTOR CABLE	

CONDUIT LENGTH CALCULATIONS

IF SITE SPECIFIC CONDITIONS EXCEED THE FOLLOWING ASSUMED VALUES THEN ADDITIONAL LENGTH MUST BE SUBTRACTED BY THE ELECTRICAL CONTRACTOR FROM THE MAXIMUM CONDUIT LENGTHS LISTED.

IF DUCT LOCATIONS ARE ALTERED FROM THE SHOWN LAYOUT IT IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO RECALCULATE THE MAXIMUM CONDUIT LENGTHS.

ASSUMED VALUES USED IN CALCULATING STATED MAXIMUM CONDUIT LENGTHS:
VERTICAL DUCTS - 10'-0"
FLOOR PENETRATIONS - 3'-0"

ELECTRICAL LEGEND			
SYM	SIZE	DESCRIPTION	REMARKS
5	AS REQUIRED	PULL BOX MOUNTED BELOW FLOOR SLAB WITH A 4" CORE DRILL WITH SLEEVE THROUGH THE SLAB ENDING FLUSH WITH THE FINISHED FLOOR IN SHOWN LOCATION.	GANTRY CABLE ACCESS
6	AS REQUIRED	PULL BOX MOUNTED BELOW FLOOR SLAB WITH A 4" CORE DRILL WITH SLEEVE AND A 3" CORE DRILL WITH SLEEVE THROUGH THE SLAB ENDING FLUSH WITH THE FINISHED FLOOR IN SHOWN LOCATIONS.	GANTRY HOSE ACCESS
7	---	EMERGENCY POWER OFF BUTTON. EXACT LOCATIONS TO BE DETERMINED BY CUSTOMER/CONTRACTOR.	SEE POWER SCHEDULE
8	---	ETHERNET SWITCH FOR ICS, IRS, GANTRY & PDC'S SUPPLIED BY SIEMENS. LOCATED INSIDE PDCA CABINET.	
9	AS REQUIRED	PULL BOX MOUNTED ABOVE FINISHED CEILING.	CARE VISION MONITOR CEILING MOUNT
10	AS REQUIRED	PULL BOX MOUNTED BELOW FLOOR SLAB WITH 6" CORE DRILL WITH SLEEVE THROUGH SLAB ENDING FLUSH WITH FINISHED FLOOR IN SHOWN LOCATION.	IMAGE CONSTRUCTION SYS.
11	AS REQUIRED	PULL BOX MOUNTED FLUSH WITH FINISHED WALL IN CONTROL AREA.	INJECTOR ELECTRONICS
12	AS REQUIRED	PULL BOX MOUNTED ABOVE FINISHED CEILING IN SHOWN LOCATION.	CEILING MTD. INJECTOR
13	AS REQUIRED	PULL BOX MOUNTED TO UNDERSIDE OF FLOOR SLAB WITH 4" CORE DRILL WITH SLEEVE THROUGH FLOOR SLAB ENDING FLUSH WITH FINISHED FLOOR IN SHOWN LOCATION.	IMAGE RECONSTRUCTION CAB.
14	3-PHASE	MAIN PANEL WITH MAIN BREAKER. EXACT LOCATION DETERMINED BY CUSTOMER/CONTRACTOR.	SEE POWER SCHEDULE.
15	---	ETHERNET CONNECTION TO HOSPITAL NETWORK, EXACT LOCATION TO BE COORDINATED WITH SIEMENS PROJECT MANAGER.	MULTIMODALITY WORKSTATION
16	AS REQUIRED	PULL BOX MOUNTED TO UNDERSIDE OF FLOOR SLAB WITH 6" CORE DRILL WITH SLEEVE THROUGH FLOOR SLAB ENDING FLUSH WITH FINISHED FLOOR IN SHOWN LOCATION.	POWER DISTRIBUTION CAB.
17	AS REQUIRED	PULL BOX MOUNTED FLUSH WITH FINISHED WALL PROVIDED WITH 2" OPENING IN FINISHED COVER. THE SURGE SUPPRESSOR MUST BE LOCATED WITHIN 3 FEET CABLE RUN FROM CIRCUIT BREAKER, AT HEIGHT DETERMINED BY CUSTOMER/ CONTRACTOR.	SEE DETAIL S-101
18	----	SYNGO VIA SERVER LOCATION PROVIDED WITH (2)ETHERNET CONNECTIONS TO FACILITY NETWORK AND (2) 110 VOLT DUPLEX OUTLETS..	SYNGO VIA SERVER
19	10" x 3 1/2"	ELECTRICAL DUCT RUN HORIZONTALLY ON THE WALL AT THE FLOOR LINE AND SURFACE MOUNTED ON FINISHED WALL AS SHOWN FOR EXCESS CABLE STORAGE.	RACEWAY
20	10" x 3 1/2"	ELECTRICAL DUCT MOUNTED FLUSH WITH FINISHED WALL IN SHOWN LOCATION PROVIDED WITH FINISHED, REMOVABLE COVERS. TO EXTEND FROM FLOOR LINE TO END ABOVE FINISHED CEILING. DUCT TO BE DIVIDED INTO TWO SECTIONS WITH METAL DIVIDERS.	RACEWAY
1	AS REQUIRED	CONDUIT FROM POWER SOURCE TO "MP" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
2	AS REQUIRED	CONDUIT FROM "MP" TO "EPO" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
3	AS REQUIRED	CONDUIT FROM "EPO" TO "EPO" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
4	AS REQUIRED	CONDUIT FROM "EPO" TO "VD1" (PDC), SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
5	AS REQUIRED	CONDUIT FROM "MP" TO "SPR" SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
6	AS REQUIRED	CONDUIT FROM "MP" TO "VD1" (PDC), SIZED BY ELECTRICAL ENGINEER OF RECORD.	FOR PDCA PART. SEE POWER SCHEDULE
7	AS REQUIRED	CONDUIT FROM "MP" TO "VD1" (PDC), SIZED BY ELECTRICAL ENGINEER OF RECORD.	FOR PDGB PART. SEE POWER SCHEDULE
8	AS REQUIRED	CONDUIT FROM "VD1" (PDC) TO "WARNING LIGHT".	
9	AS REQUIRED	CONDUIT FROM "VD1" (PDC) TO "DS".	
10	2-1/2"	CONDUIT FROM "PDC" TO "ICS".	MAX. CONDUIT LENGTH 76'-0"
11	2"	CONDUIT FROM "PDC" TO "IRS".	MAX. CONDUIT LENGTH 76'-0"
12	(3) 3"	CONDUITS FROM "PDC" TO "B" WITH A MINIMUM 6" BENDING RADIUS.	MAX. CONDUIT LENGTH 76'-0"
13	3"	CONDUIT FROM "B" TO "ICS".	MAX. CONDUIT LENGTH 76'-0"
14	1-1/2"	CONDUIT FROM "B" TO "IRS".	MAX. CONDUIT LENGTH 76'-0"
15	(2) 3"	CONDUITS, IF REQUIRED PER LOCAL CODE, FROM ON-SITE WATER CONNECTION TO "B1". TO CONTAIN SIEMENS COOLING WATER HOSES WITH A MINIMUM 6" BENDING RADIUS.	MAX. CONDUIT LENGTH 93'-0" SEE SHEET M-101
16	1"	CONDUIT, IF REQUIRED PER LOCAL CODE, FOR CONDENSATION HOSE FROM "B1" TO SELECTED DRAIN TYPE. THE MINIMUM BENDING RADIUS IS 1 3/16".	MAX. CONDUIT LENGTH 29'-9"
17	2-1/2"	CONDUIT FROM "ICS" TO "F1".	MAX. CONDUIT LENGTH 79'-0"
18	2-1/2"	CONDUIT FROM "VD1" (PDC) TO "F1".	MAX. CONDUIT LENGTH 58'-0"
19	2-1/2"	CONDUIT FROM "IN2" TO "IN3", VERIFY LENGTH RESTRICTIONS WITH MANUFACTURER.	

CONTRACTOR SUPPLIED CABLES

FROM	VIA	TO	DESCRIPTION	REMARKS
POWER SOURCE	1	MP	3-PHASE CONDUCTORS, 1 NEUTRAL, 1 GROUND ALL TO BE THE SAME SIZE. SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
MP	2	EPO	DETERMINED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
EPO	3	EPO	DETERMINED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
EPO	4,VD1	PDC	DETERMINED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
MP	5	SPR	3-PHASE CONDUCTORS, 1 NEUTRAL AND 1 GROUND ALL TO BE THE SAME SIZE. SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
MP	6,VD1	PDC	3 PHASE CONDUCTORS, 1 NEUTRAL AND 1 GROUND ALL TO BE THE SAME SIZE, MAX. 3/0. SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
MP	7,VD1	PDC	3 PHASE CONDUCTORS, 1 NEUTRAL AND 1 GROUND ALL TO BE THE SAME SIZE, MAX. 3/0. SIZED BY ELECTRICAL ENGINEER OF RECORD.	SEE POWER SCHEDULE
PDC	VD1,8	WARNING LIGHT	DETERMINED BY ELECTRICAL ENGINEER OF RECORD.	
PDC	VD1,9	DS	DETERMINED BY ELECTRICAL ENGINEER OF RECORD.	

ELECTRICAL NOTES

1) COMPLIANCE: ELECTRICAL WORK SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA-70), O.S.H.A. REGULATIONS, AS WELL AS APPLICABLE REGULATIONS OF CITY, COUNTY, STATE AND FEDERAL AGENCIES. PROVIDE MATERIALS AND EQUIPMENT THAT COMPLY TO ANSI, IEEE AND NEMA STANDARDS. WHERE APPLICABLE, PROVIDE ONLY MATERIALS AND PRODUCTS THAT ARE U.L. LISTED AND LABELED. CUSTOMER'S/CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF NECA STANDARD OF INSTALLATION.

2) QUALITY ASSURANCE: THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD TO INSURE THAT THE NEW WORK WILL FIT TO THE EXISTING STRUCTURE AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST OR BE DISCOVERED THAT PREVENT THE INSTALLATION OF WORK AS SHOWN, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO FABRICATION OF EQUIPMENT, OR THE PERFORMANCE OF ANY WORK THAT MAY BE AFFECTED. DO NOT ALTER DRAWINGS, DIMENSIONS, OR SPECIFICATIONS IN ANY WAY WITHOUT CONTACTING AND RECEIVING WRITTEN CONFIRMATION FROM SMS PROGRAM MANAGER. ALL DIMENSIONS ARE FROM FINISHED SURFACES. CONDUIT AND PULL BOXES TO BE INSTALLED BY THE CUSTOMER/CONTRACTOR WITH LOCATIONS BEING FIELD VERIFIED BY SMS PROJECT MANAGER.

3) POWER SUPPLY SOURCE: POWER SUPPLIES FOR SIEMENS MEDICAL SOLUTIONS EQUIPMENT SHALL BE DEDICATED SERVICES KEPT ENTIRELY FREE AND INDEPENDENT OF ALL OTHER BUILDING WIRING AND EQUIPMENT, SUCH AS: ELEVATORS, GENERATORS, PUMPS, HVAC SYSTEMS, ETC. THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE CUSTOMER/UTILITY COMPANY FIELD REPRESENTATIVE.

4) WORK FURNISHED BY CUSTOMER/CONTRACTOR: WORK NOT PROVIDED BY SIEMENS MEDICAL SOLUTIONS BUT SHOWN ON DRAWINGS TO BE FURNISHED AND INSTALLED BY CUSTOMER/CONTRACTOR INCLUDES THE FOLLOWING BUT IS NOT LIMITED TO UNLESS NOTED OTHERWISE: ELECTRICAL RACEWAYS AND DUCTS, WIRING TROUGHS, PULL BOXES, CONDUITS, CIRCUIT BREAKERS, EMERGENCY OFF BUTTONS, DOOR SWITCHES, WARNING LIGHTS, WIRING, WIRING DEVICES, CONNECTORS, LIGHTING EQUIPMENT AND GROUNDING.

5) RACEWAY AND CONDUIT NOTES: RACEWAY SHALL BE ELECTRIC METALLIC TUBING (EMT) FOR RIGID CONDUIT WORK, OR WHERE SHORT OFF-SET CONNECTIONS ARE REQUIRED LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL BE USED. FIELD BENDS SHALL NOT BE LESS THAN AS SHOWN IN TABLE 348-10 OF THE NATIONAL ELECTRICAL CODE. PROVIDE A JETLINE "SUPER TRUE TAPE", OR EQUIVALENT CONDUIT MEASURING TAPE FISH LINE IN ALL RACEWAYS AND CONDUITS. CONDUIT BODIES SHALL NOT BE USED. WHERE A CONDUIT ENTERS A BOX, FITTING, OR OTHER ENCLOSURE, AN INSULATED THROUGH CONNECTOR SHALL BE PROVIDED TO PROTECT THE WIRE FROM ABRASION. CONNECTORS SHALL BE DOUBLE SET SCREW TYPE, STEEL CONCRETE TIGHT. KEEP RACEWAYS AT LEAST 6 INCHES AWAY FROM PARALLEL RUNS OF FLUES OR STEAM AND HOT WATER PIPES. INSTALL RACEWAY RUNS ABOVE WATER AND STEAM PIPES PROVIDED THAT CABLE RUN DISTANCES ARE MAINTAINED. USE TEMPORARY CLOSURES TO PREVENT FOREIGN MATTER FROM ENTERING RACEWAY.

CONDUIT RUNS ARE SHOWN SCHEMATICALLY. INSTALL CONDUIT WITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE CONSIDERING THE BUILDING CONSTRUCTION AND OBSTRUCTIONS, EXCEPT AS OTHERWISE INDICATED. THE CONTRACTOR SHALL MAKE CERTAIN THAT ANY CONDUIT/RACEWAY RUNS CONTAINING SIEMENS MEDICAL SYSTEMS CABLES DO NOT EXCEED THE SPECIFIED MAXIMUM DISTANCES AS SHOWN ON THE ELECTRICAL DETAILS.

PROVIDE ENCLOSED METAL RACEWAY SYSTEM (WIRE DUCT) WHERE SHOWN ON DRAWINGS WITH DIVIDERS TO SEPARATE THE DUCT (FOR POWER AND SIEMENS MEDICAL SOLUTIONS CABLES). DIVIDERS AND CROSSOVER PIECES TO BE PROVIDED AS NECESSARY. FOR UL CERTIFIED SYSTEMS, THE CABLE TO CABLE AS WELL AS THE CIRCUIT TO CIRCUIT SEPARATION REQUIREMENT WAS EVALUATED DURING THE UL SYSTEM INVESTIGATION OF THIS EQUIPMENT. ADDITIONAL SEPARATION OF THE SYSTEM CABLE ASSEMBLIES INTO SEPARATE OR PARTITIONED RACEWAYS, UNLESS OTHERWISE NOTED, IS NOT NECESSARY TO INSURE SEPARATION OF CIRCUITS, AS THEY CAN BE IN THE SAME RACEWAY.

PROVIDE WIRE DUCT/RACEWAY WITH ACCESSIBLE REMOVABLE COVERS. LOCATIONS OF OPENINGS TO BE CUT IN FIELD ARE TO BE COORDINATED WITH SIEMENS PROJECT MANAGER. ELECTRICAL PULL BOXES AND RACEWAY COVERS SHALL BE INSTALLED IN A MANNER TO ALLOW ACCESSIBILITY FOR INSTALLATION AND MAINTENANCE. IN- FLOOR TRENCH DUCT AND FLUSH FLOOR BOXES SHALL BE PROVIDED WITH FULLY GASKETED REMOVABLE COVERS.

6) WIRING: WIRING SHALL BE INSTALLED IN METAL RACEWAY, 600 VOLT CLASS, STRANDED TYPE THHN-THWN, SINGLE CONDUCTOR ANNEALED COPPER FOR A MAXIMUM OPERATING TEMPERATURE OF 75° C (185° F), SIZED AS INDICATED. THE CUSTOMER/CONTRACTOR SHALL LEAVE MINIMUM 10 FT. WIRE TAILS AT ALL OUTLET POINTS WITH WIRE IDENTIFICATION TAGGED AT BOTH ENDS FOR FINAL CONNECTION BY SIEMENS MEDICAL SOLUTIONS.

7) IN ADDITION TO THE CIRCUIT BREAKER LOAD CURRENT RATING, CONSIDERATION MUST ALSO BE GIVEN TO SELECTING CIRCUIT BREAKERS THAT HAVE A HIGH ENOUGH SHORT CIRCUIT CURRENT WITHSTAND RATING TO SAFELY COORDINATE WITH THE POWER SYSTEM AVAILABLE SHORT CIRCUIT CURRENT. GENERALLY, WHEN THE 480 VOLT, 3 PHASE, X-RAY EQUIPMENT IS SERVED FROM A POWER SUPPLY SYSTEM THAT IS PROVIDED WITH A 500 KVA OR SMALLER TRANSFORMER, A STANDARD 14,000 RMS AMPERE WITHSTAND RATED CIRCUIT BREAKER WILL BE ADEQUATE. HOWEVER, IF THE POWER SUPPLY SYSTEM TRANSFORMER IS LARGER THAN 500 KVA, THEN THE CIRCUIT BREAKERS HAVING A SHORT CIRCUIT WITHSTAND RATING GREATER THAN 14,000 RMS AMPERES MAY BE REQUIRED.

POWER QUALITY

POOR POWER WILL ALTER EQUIPMENT PERFORMANCE

IT IS IN THE CUSTOMER'S INTEREST THAT THE ELECTRICAL CONTRACTOR BE RESPONSIBLE FOR TESTING AND VERIFYING THAT THE EQUIPMENT POWER SUPPLY COMPLIES WITH THE SIEMENS SPECIFICATIONS.

ATTENTION:

THIS DRAWING IS DESIGNED TO CONFORM TO FEATURES AND EQUIPMENT REQUIREMENTS PRESENTED AT THE TIME OF THEIR PREPARATION. SINCE BOTH THESE FACTORS ARE SUBJECT TO DESIGN MODIFICATION, THEY ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.

THIS SET OF PLANS REPRESENTS A COMPLETE SET OF DETAILS AND SHOULD NOT BE SEPARATED.

IT IS RECOMMENDED THAT THE SIEMENS DRAWINGS BE INCORPORATED WITH THE CONSTRUCTION DOCUMENTS FOR REFERENCE.

ALL DIMENSIONS SHOWN ON THIS DRAWING ARE FROM FINISHED SURFACES.

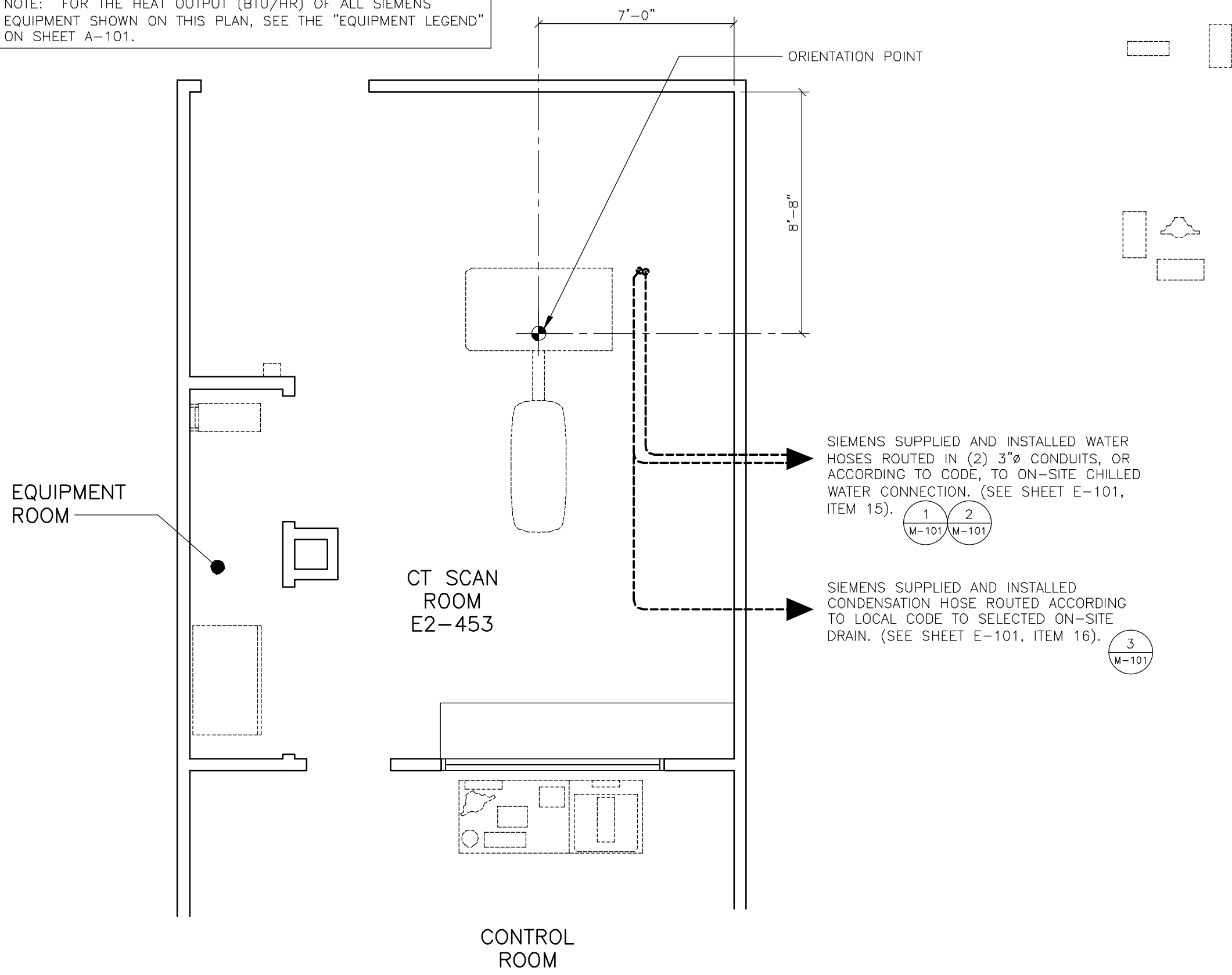
THIS DRAWING DOES NOT PROVIDE RADIATION SHIELDING REQUIREMENTS FOR X-RAY AND ASSOCIATED EQUIPMENT. THE CUSTOMER IS RESPONSIBLE FOR CONSULTING WITH A REGISTERED RADIATION PHYSICIST TO SPECIFY RADIATION PROTECTION.

FINISHED ROOM HEIGHT

FOR CT GANTRY ONLY	MINIMUM 7'-6 9/16"
CAREVISION MONITOR/CEILING MOUNT	MIN. 9'-2 5/8" MAX. 11'-2 5/8"

PROJECT MANAGER: JASON AXELROD TEL: (415) 361-9137 FAX: EMAIL: jason.axelrod@siemens.com		EXT:	
SIEMENS			
PALO ALTO DIVISION VAMC			
3801 MIRANDA AVE (04D), PALO ALTO, CA 94304 CT SUITE E2-453 - SOMATOM FORCE			
THE USE OR REPRODUCTION OF THIS TITLE BLOCK WITHOUT SIEMENS AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW.		PROJECT #: 1401829	
ALL RIGHTS ARE RESERVED.		SHEET: E-101	
SCALE: AS NOTED	REF. #: 1-91J73	DRAWN BY: J. DRAMS	DATE: 08/12/14

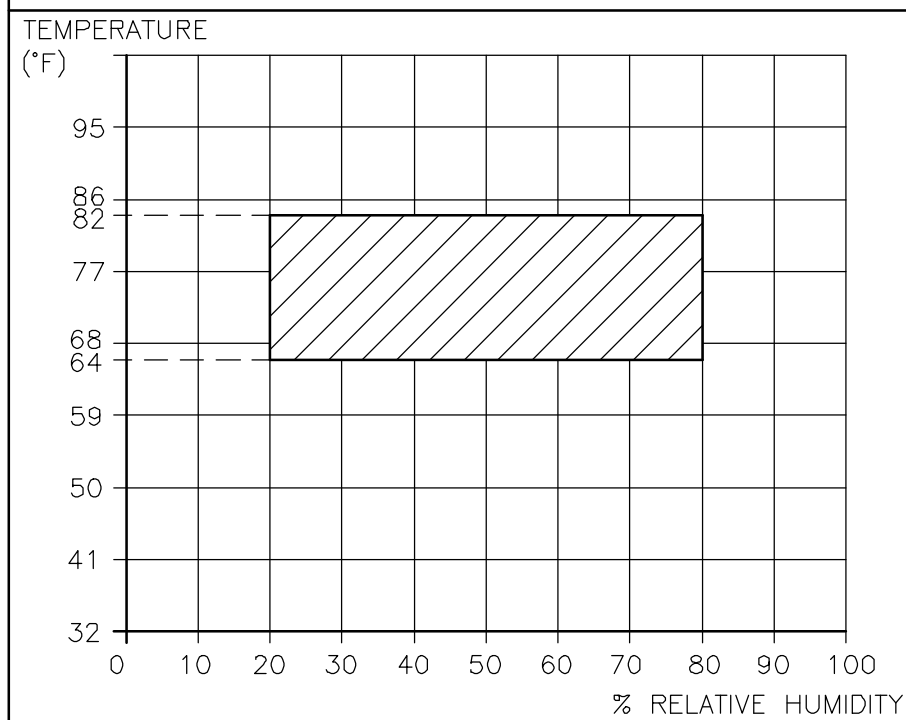
NOTE: FOR THE HEAT OUTPUT (BTU/HR) OF ALL SIEMENS EQUIPMENT SHOWN ON THIS PLAN, SEE THE "EQUIPMENT LEGEND" ON SHEET A-101.



MECHANICAL PLAN

SCALE: 1/4" = 1'-0"

ENVIRONMENTAL REQUIREMENTS



TECHNICAL DATA

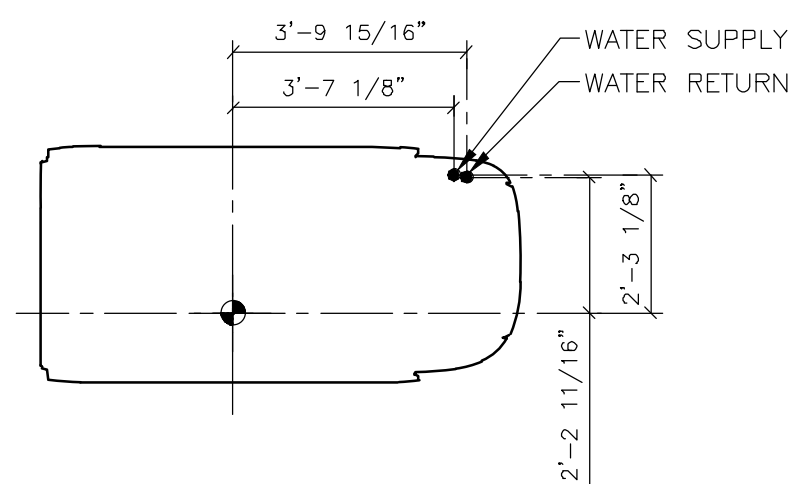
WATER SUPPLY RATE	SEE WATER FLOW RATE DIAGRAM
TEMPERATURE RANGE OF WATER	MINIMUM 39.2°F TO 60.8°F MAXIMUM
TEMPERATURE GRADIENT OF WATER	MAXIMUM 1 K/MINUTE
BTU DISCHARGE TO THE WATER	58,045 BTU/HR
NOMINAL OPERATING PRESSURE	29 TO 87 PSI (145 PSI MAXIMUM) (1)
FILTRATION	200 MICRONS
DIFFERENTIAL PRESSURE	SEE DIFFERENTIAL PRESSURE DIAGRAM

WATER QUALITY
THE WATER MUST BE OF DRINKABLE QUALITY. IF THE WATER IS OF LESSER QUALITY A FILTER WITH A MESH OF 200 MICRONS IS REQUIRED IN THE ON-SITE INLET.

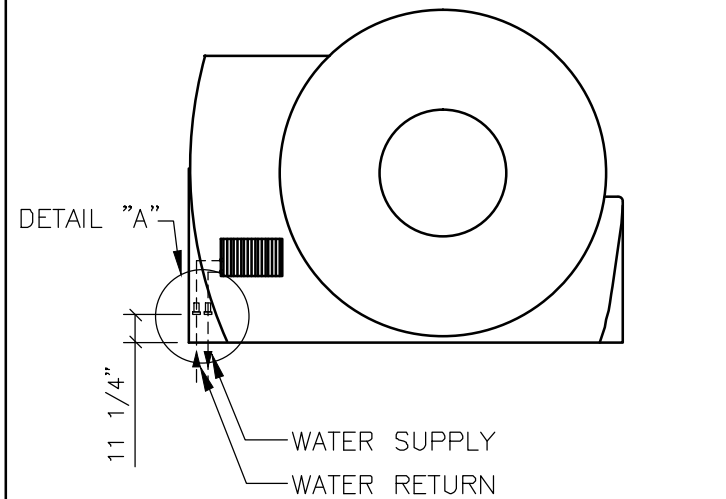
ANTIFREEZE
AN ANTIFREEZE AGENT MAY BE ADDED, BY THE TECHNICIAN WHO WILL START THE SYSTEM, TO THE ON-SITE CIRCUIT TO PROVIDE PROTECTION FOR TEMPERATURES TO -13°F WITH A MIXTURE OF 40% ANTIFREEZE. TO COMPENSATE FOR THE RESULTING REDUCTION IN COOLING CAPACITY, THE WATER FLOW RATE WILL HAVE TO BE INCREASED. WATER WITH ANTIFREEZE FROM THE ON-SITE CHILLED WATER MUST BE BETWEEN 39.2° F AND 57.2° F. ONLY WATER AT THIS TEMPERATURE MAY FLOW THROUGH THE WATER/WATER COOLING SYSTEM. ANTIFREEZE TO BE SUPPLIED BY THE CUSTOMER/CONTRACTOR. CHILLER MANUFACTURER'S SPECIFICATIONS MAY DIFFER, VERIFY WITH SIEMENS PROJECT MANAGER.

(1) TO GUARANTEE THE LIMIT OF THE MAXIMUM WATER PRESSURE OF 145 PSI, THE ON-SITE COOLING WATER SYSTEM MUST PROVIDE A SUITABLE SAFETY DEVICE, EX. PRESSURE RELIEF VALVE.

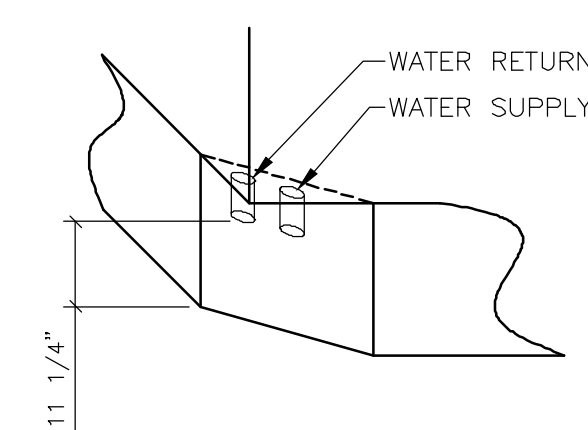
GANTRY TOP VIEW



GANTRY (BACK SIDE)

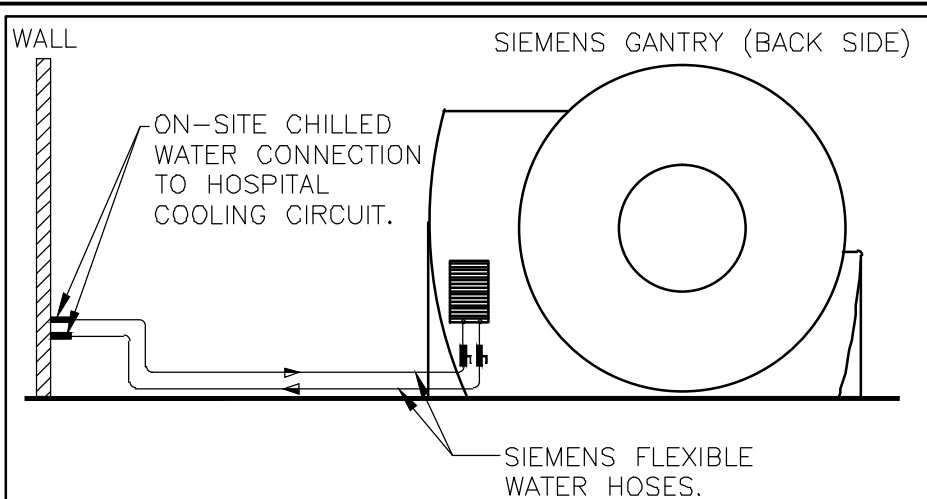


DETAIL "A"



1 GANTRY HOSE CONNECTION

SCALE: NONE



ON-SITE CHILLED WATER REQUIREMENTS

THE COOLING SYSTEM IS INTEGRATED WITHIN THE GANTRY. THE ON-SITE CHILLED WATER SUPPLY AND RETURN ARE CONNECTED DIRECTLY TO THE GANTRY.

WATER TEMPERATURE: MINIMUM 39.2°F TO 60.8°F MAXIMUM
NOMINAL OPERATING PRESSURE: 29 TO 87 PSI (145 PSI MAXIMUM)
FLOW RATE: DEPENDS ON WATER TEMPERATURE
DIFFERENTIAL PRESSURE: AS RELATES TO WATER CIRCULATION

A 3/4" HOSE BIB AND A WATER DRAIN (EX. SINK) MUST BE AVAILABLE NEAR THE GANTRY FOR FILLING THE COOLING SYSTEM.

CHILLED WATER HOSES

THE SIEMENS FLEXIBLE CHILLED WATER HOSES HAVE TO BE ORDERED SEPARATELY AND WILL BE SUPPLIED IN THE FOLLOWING THREE LENGTHS ONLY: 31 FEET, 64 FEET AND 96 FEET. THE MIN. ACCEPTABLE BENDING RADIUS OF THE HOSES IS 6". THE OUTER DIAMETER OF THE WATER HOSES IS 1-3/8". CUSTOMER/CONTRACTOR TO INSULATE NON-INSULATED WATER HOSES WITH 1/2" ARMAFLEX INSULATION. INSULATED WATER HOSES ARE AVAILABLE THROUGH SIEMENS. THESE INSULATED HOSES ARE USABLE FOR ON-SITE WATER TEMPERATURE RANGES GREATER THAN OR EQUAL TO 46.4 °F TO 60.8 °F. ADDITIONAL INSULATION MUST BE SUPPLIED AND APPLIED TO THE HOSES BY THE CUSTOMER/CONTRACTOR FOR ON-SITE WATER TEMPERATURE RANGES 39.2° F TO <46.4° F. THIS MAY REQUIRE AN INCREASE IN THE CONDUIT/DUCT SIZE FOR HOSES.

2 CHILLED WATER

SCALE: NONE

FINISHED ROOM HEIGHT

FOR CT GANTRY ONLY	MINIMUM 7'-6 9/16"
CAREVISION MONITOR/CEILING MOUNT	MIN. 9'-2 5/8" MAX. 11'-2 5/8"

ATTENTION:

— THIS DRAWING IS DESIGNED TO CONFORM TO FEATURES AND EQUIPMENT REQUIREMENTS PRESENTED AT THE TIME OF THEIR PREPARATION. SINCE BOTH THESE FACTORS ARE SUBJECT TO DESIGN MODIFICATION, THEY ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES.
— THIS SET OF PLANS REPRESENTS A COMPLETE SET OF DETAILS AND SHOULD NOT BE SEPARATED.

— IT IS RECOMMENDED THAT THE SIEMENS DRAWINGS BE INCORPORATED WITH THE CONSTRUCTION DOCUMENTS FOR REFERENCE.

— ALL DIMENSIONS SHOWN ON THIS DRAWING ARE FROM FINISHED SURFACES.
— THIS DRAWING DOES NOT PROVIDE RADIATION SHIELDING REQUIREMENTS FOR X-RAY AND ASSOCIATED EQUIPMENT. THE CUSTOMER IS RESPONSIBLE FOR CONSULTING WITH A REGISTERED RADIATION PHYSICIST TO SPECIFY RADIATION PROTECTION.

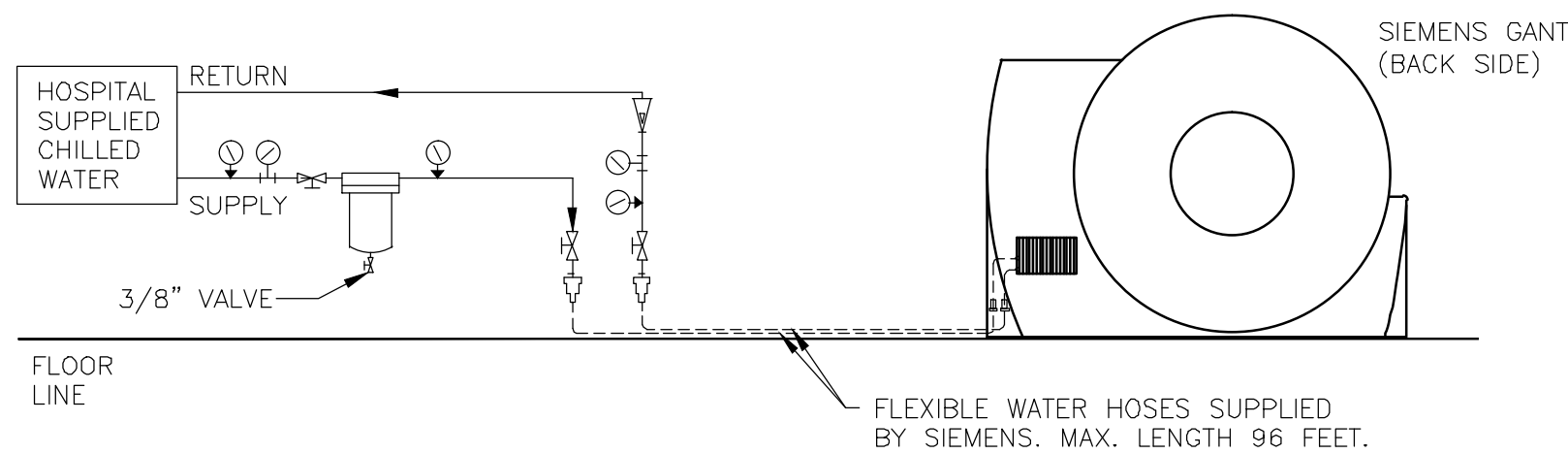
CHILLED WATER COOLING CIRCUIT

PIPING AND HOSE SCHEMATIC CLOSED LOOP CHILLED WATER

PIPING AND FIXTURES TO BE SPECIFIED BY THE MECHANICAL ENGINEER OF RECORD AND TO BE SUPPLIED AND INSTALLED BY THE MECHANICAL CONTRACTOR.

RECOMMENDED PIPE SIZE FOR TOTAL LENGTH OF PIPING LOOP IS USUALLY 1". THE MECHANICAL ENGINEER MUST DETERMINE THE ACTUAL PIPE SIZE REQUIRED FOR THE TOTAL LENGTH OF THE RUN. THE ON-SITE PIPES ARE TO BE INSULATED WITH 1/2" ARMAFLEX INSULATION BY THE CUSTOMER/CONTRACTOR. SIEMENS NON-INSULATED FLEXIBLE WATER HOSES ARE TO BE INSULATED WITH 1/2" ARMAFLEX INSULATION BY THE CUSTOMER/CONTRACTOR. INSULATED WATER HOSES ARE AVAILABLE THROUGH SIEMENS. THESE INSULATED HOSES ARE USABLE FOR ON-SITE WATER TEMPERATURE RANGES GREATER THAN OR EQUAL TO 46.4 °F TO 60.8 °F. ADDITIONAL INSULATION MUST BE SUPPLIED AND APPLIED TO THE HOSES BY THE CUSTOMER/CONTRACTOR FOR ON-SITE WATER TEMPERATURE RANGES 39.2° F TO <46.4° F. THIS MAY REQUIRE AN INCREASE IN THE CONDUIT/DUCT SIZE FOR HOSES.

THE CHILLED WATER DELIVERY SYSTEM MUST BE INSTALLED AND CHARGED PRIOR TO EQUIPMENT DELIVERY.



ALL COMPONENTS SUPPLIED BY MECHANICAL CONTRACTOR AT A CONVENIENT HEIGHT FOR SERVICING. ALL ITEMS IN THE FIXTURE LEGENDS CAN BE ORDERED FROM PROCAM CONTROLS, (800) 333-2556 OR FAX (214) 422-6262

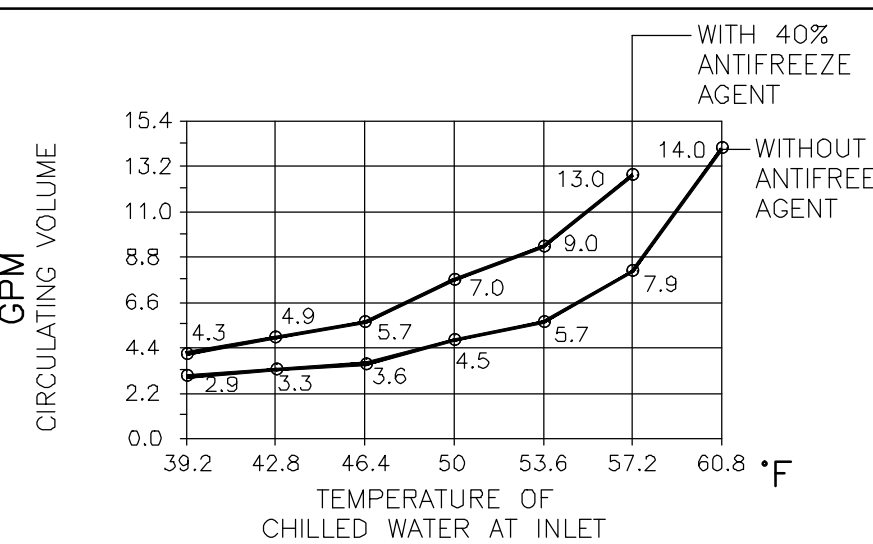
REQUIRED FIXTURE LEGEND

- 1" MALE NPT
- FILTER W/200 MICRON BAG OR EQUAL THAT MEETS SPECIFICATION.

RECOMMENDED ADDITIONAL FIXTURE LEGEND

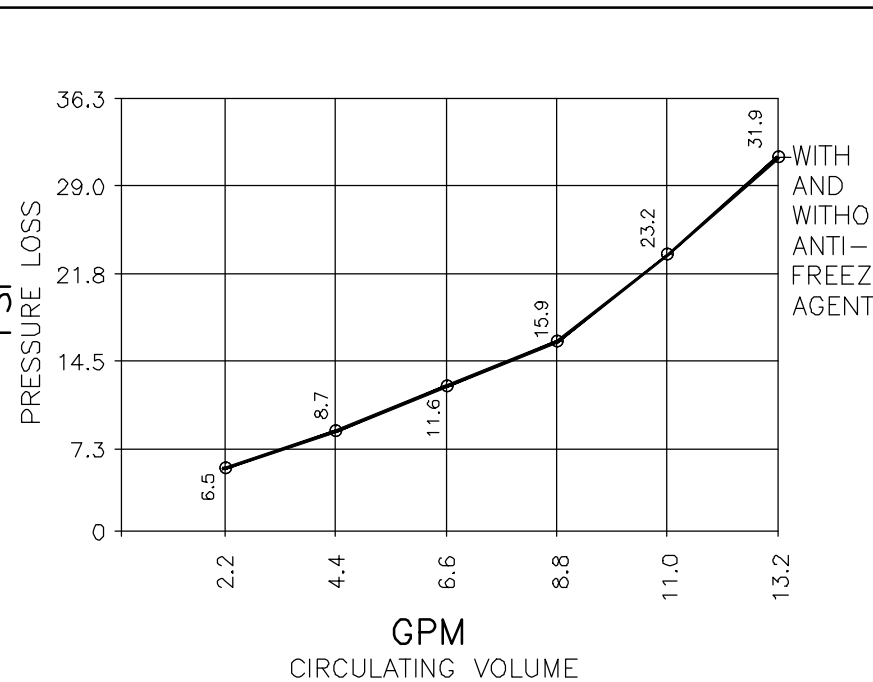
- VISUAL FLOW GAUGE F-451002LHN (2-20 GPM)
- BALL VALVE (BRONZE) B6080
- THERMOMETER (20°-120°F) TG-1, 530-30005
- PRESSURE GAUGE 530-2005 (LIQUID FILLED 0-160 PSI)

WATER FLOW RATE



THIS DIAGRAM ILLUSTRATES THE DEPENDENCY OF THE MINIMUM CIRCULATING VOLUME ON CHILLED WATER TEMPERATURE.

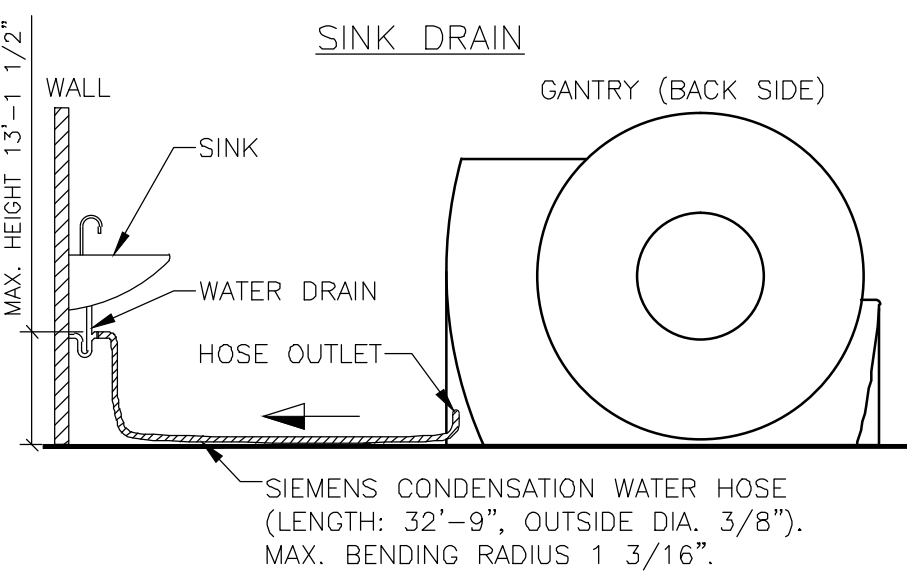
PRESSURE LOSS



THIS DIAGRAM ILLUSTRATES THE RELATIONSHIP BETWEEN THE CIRCULATING VOLUME AND THE PRESSURE LOSS IN THE COOLING UNIT WITHIN THE GANTRY.

A WATER DRAIN IS REQUIRED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER/CONTRACTOR TO DRAIN CONDENSED WATER FROM THE GANTRY. THE DRAIN MUST BE WITHIN 32"-9" OF THE GANTRY (TO USE THE DELIVERED WATER HOSE) AND CANNOT EXCEED 13'-1 1/2" ABOVE THE FINISHED FLOOR. THE DISTANCE FROM THE GANTRY TO THE DRAIN MAY BE EXTENDED UP TO 65'-7" WITH EXTENSION MATERIAL PROVIDED BY THE CUSTOMER/CONTRACTOR. BELOW ARE SOME EXAMPLES OF POSSIBLE WATER DRAINS. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHICH DRAIN TYPE TO USE AND FOR SPECIFYING, SUPPLYING AND INSTALLING THE PLUMBING FIXTURES NECESSARY TO CONNECT THE SIEMENS WATER HOSE TO THE SELECTED DRAIN.

THE MAX. PUMP CAPACITY OF THE CONDENSED WATER IS 5.3 GALLONS/HR AT 75% RELATIVE HUMIDITY.



3 CONDENSATION WATER DRAIN

FORCE
REV. 0

SIEMENS

PALO ALTO DIVISION VAMC

3801 MIRANDA AVE (04D), PALO ALTO, CA 94304
CT SUITE E2-453 - SOMATOM FORCE

PROJECT #:

1401829

SHEET 8 OF 8

DRAWN BY: J. DRAMS

DATE: 08/12/14

SHEET:

M-101

THE USE OR REPRODUCTION OF THIS TITLE BLOCK WITHOUT SIEMENS AUTHORIZATION WILL RESULT IN PROSECUTION UNDER FULL EXTENT OF THE LAW.

ALL RIGHTS ARE RESERVED.

SCALE: AS NOTED

REF. #1-91J713